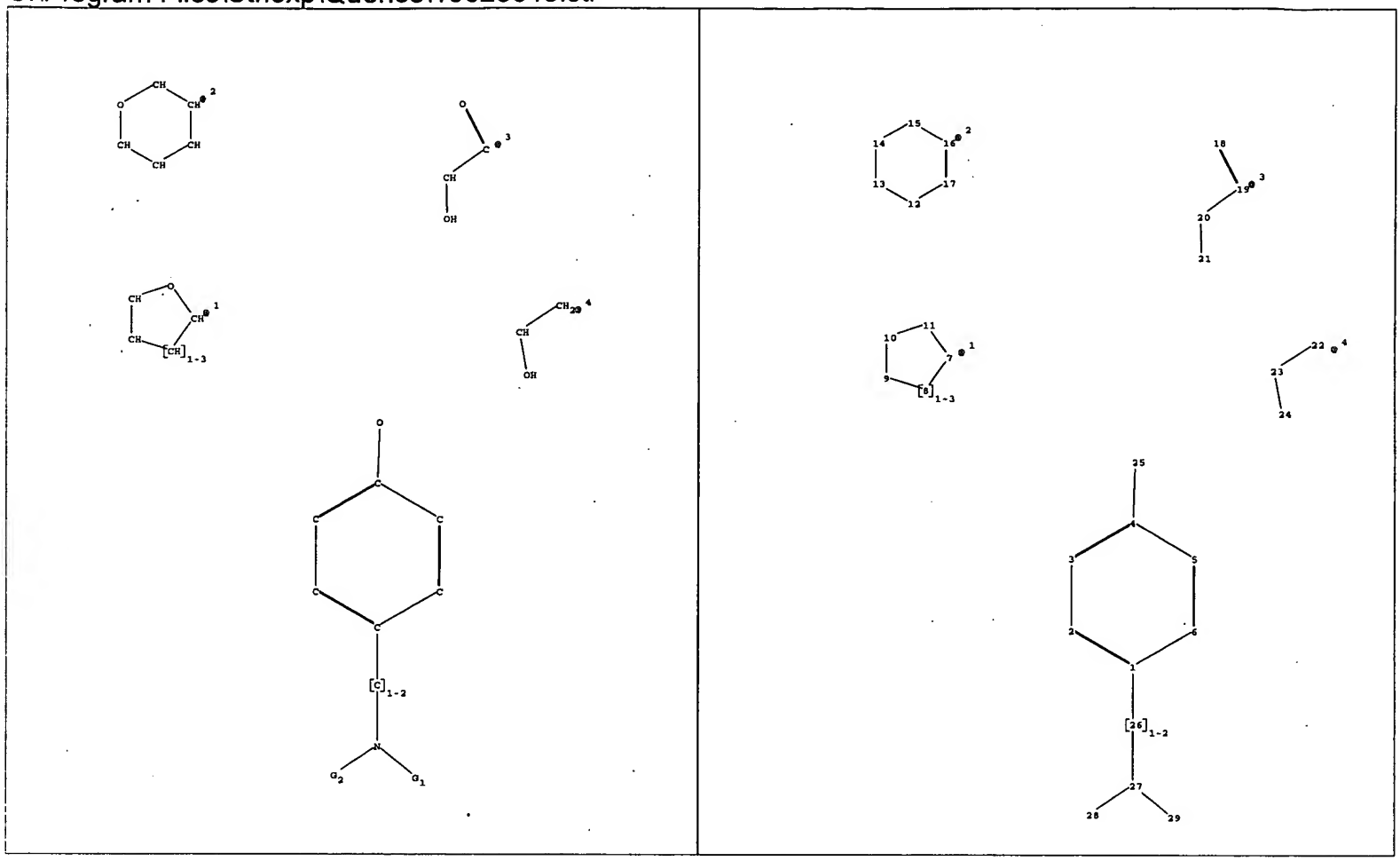
EAST Search History

Ref #	Hits	Search Query	DBs	Default Operator	Plurals	Time Stamp
L1	22398	dopamine catecholamine hydroxytyramine (hydroxy adj tyramine)	US-PGPUB; USPAT	OR	ON	2006/11/10 14:08
L2	56953	glucosyl$9 glycosyl$9 gluconami$4 ribonami$4 glycoconjugate	US-PGPUB; USPAT	OR	ON	2006/11/10 14:09
L3	233	1 same 2	US-PGPUB; USPAT	OR	ON	2006/11/10 13:19
L4	825735	@ad>"20030722"	US-PGPUB; USPAT	OR	ON	2006/11/10 13:19
L5	117	3 not 4	US-PGPUB; USPAT	OR	ON	2006/11/10 13:31
L6	17345	(blood adj brain) bbb	US-PGPUB; USPAT	OR	ON	2006/11/10 13:31
L7	555	6 same 1	US-PGPUB; USPAT	OR	ON	2006/11/10 13:31
L8	69	7 and 2	US-PGPUB; USPAT	OR	ON	2006/11/10 13:31
L9	44	8 not 4	US-PGPUB; USPAT	OR	ON	2006/11/10 13:31
L10	137	6 same 2	US-PGPUB; USPAT	OR	ON	2006/11/10 13:32
L11	25	10 and 1	US-PGPUB; USPAT	OR	ON	2006/11/10 13:32
L12	17	11 not 4	US-PGPUB; USPAT	OR	ON	2006/11/10 13:32
L13	48	(9 12) not 5	US-PGPUB; USPAT	OR	ON	2006/11/10 13:32
L14	4491	dopamine catecholamine hydroxytyramine (hydroxy adj tyramine)	EPO; JPO; DERWENT	OR	ON	2006/11/10 14:09
L15	6619	glucosyl$9 glycosyl$9 gluconami$4 ribonami$4 glycoconjugate	EPO; JPO; DERWENT	OR	ON	2006/11/10 14:09
L16	21	14 and 15	EPO; JPO; DERWENT	OR	ON	2006/11/10 14:09

C:\Program Files\Stnexp\Queries\10625645.str



chain nodes :
18 19 20 21 22 23 24 26 27 28 29
ring nodes :
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17
ring/chain nodes :
25
chain bonds :
1-26 18-19 19-20 20-21 22-23 23-24 26-27 27-28 27-29
ring/chain bonds :
4-25
ring bonds :
1-2 1-6 2-3 3-4 4-5 5-6 7-8 7-11 8-9 9-10 10-11 12-13 12-17 13-14 14-15 15-16 16-17
exact/norm bonds :
4-25 7-8 7-11 8-9 9-10 10-11 12-13 12-17 13-14 14-15 15-16 16-17 18-19 20-21 23-24 26-27
27-28 27-29
exact bonds :
1-26 19-20 22-23
normalized bonds :
1-2 1-6 2-3 3-4 4-5 5-6
isolated ring systems :
containing 1 :

G1:H,CH3

G2:[*1],[*2],[*3],[*4]

Match level :

1:Atom 2:Atom 3:Atom 4:Atom 5:Atom 6:Atom 7:Atom 8:Atom 9:Atom 10:Atom 11:Atom 12:Atom 13:Atom 14:Atom 15:Atom 16:Atom 17:Atom 18:CLASS 19:CLASS 20:CLASS 21:CLASS 22:CLASS 23:CLASS 24:CLASS 25:CLASS 26:CLASS 27:CLASS 28:CLASS 29:CLASS

L24 ANSWER 1 OF 68 CAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 2006:410199 CAPLUS <<LOGINID::20061031>>
DOCUMENT NUMBER: 144:431654
TITLE: Flavour modulating substances
INVENTOR(S): Winkel, Chris; Renes, Harry
PATENT ASSIGNEE(S): Quest International Services B.V., Neth.; Quest International B.V.
SOURCE: PCT Int. Appl., 18 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 5
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2006046853	A1	20060504	WO 2005-NL719	20051006
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, LY, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
WO 2005096844	A1	20051020	WO 2005-NL258	20050406
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				

PRIORITY APPLN. INFO.:

EP 2004-77980	A	20041029
WO 2005-NL258	A	20050406
EP 2004-76080	A	20040406
EP 2004-76247	A	20040426
EP 2005-100657	A	20050201

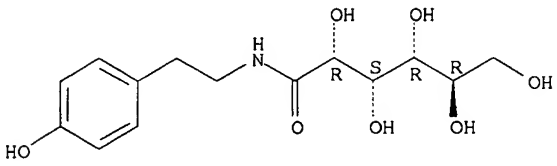
AB Novel flavor modulating subtances were prepared according to formula and/or edible salts thereof: R1CR2(OR3)CONR4YX (I), where Y is C1-C5 alkylene or C2-C5 alkenyl, each optionally substituted with 1-5 substituents selected from hydroxyl, C1-C3 alkoxyl and C1-C3 acyl; X is pheny, substituted with one or more substituents selected from hydroxyl, C1-C3 alkoxyl, and C1-C3 hydroxyalkyl; R1 and R2 represent hydrogen, C1-C8 alkyl, C2-C8 alkenyl, C3-C8 cycloalkyl or C3-C8 cycloalkenyl, optionally substituted with 1-8 substituents selected from hydroxyl, oxo, C1-C3 alkyl, C2-C3 alkenyl, and C1-C3 carboxyl; R3 represents hydrogen, C1-C3 acyl, C1-C3 alkyl, each optionally substituted with 1-3 hydroxyl group; and R4 represent hydrogen, C1-C6 alkyl, C2-C6 alkenyl, C1-C3 acyl, C3-C6 cycloalkyl, C3-C6 cycloalkenyl or C1-C6 acyl, each optionally substituted with 1-5 substituents selected from hydroxyl, C1-C3 alkyl and C2-C3 alkenyl. It was found that substances represented by I can advantageously be used to impart desirable flavor, especially taste attributes to foodstuffs, beverages, and pharmaceutics they are incorporated in. In addition said substances are capable of modulating and complementing the sensory impact of other flavor imparting substances. Thus, the present flavor modulating substances are advantageously applied in flavor compns., foodstuffs, beverages and pharmaceutics. Typical examples of flavor modulating substances according to the present invention include N-lactoyl tyramine, N-gluconyl tyramine, N-lactoyl 4-hydroxybenzylamine, N-lactoyl vanillylamine and N-lactoyl-**dopamine**.

IT **850848-26-9**
RL: FFD (Food or feed use); PAC (Pharmacological activity); BIOL

(Biological study); USES (Uses)
(flavor modulating substances for use in foodstuffs, beverages, and pharmaceuticals)

RN 850848-26-9 CAPLUS
CN D-Gluconamide, N-[2-(4-hydroxyphenyl)ethyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



REFERENCE COUNT: 6 THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L24 ANSWER 2 OF 68 CAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 2005:1330357 CAPLUS <<LOGINID::20061031>>
DOCUMENT NUMBER: 144:69827
TITLE: Dihydroxybiphenylacetamides as Factor VIIa inhibitors, their preparation, pharmaceutical compositions, and use in therapy
INVENTOR(S): Torkelson, Steven M.; Vojkovsky, Tomas
PATENT ASSIGNEE(S): Axys Pharmaceuticals, Inc., USA
SOURCE: PCT Int. Appl., 43 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2005121102	A2	20051222	WO 2005-US19420	20050602
WO 2005121102	A3	20060126		

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW
RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

PRIORITY APPLN. INFO.: US 2004-576330P P 20040602

AB The invention relates to a group of 12 different dihydroxybiphenylacetamides, e.g., I, which are inhibitors of Factors VIIa, IXa, Xa, and XIa, in particular Factor VIIa. The invention also relates to the preparation of these dihydroxybiphenylacetamides, pharmaceutical compns. comprising a therapeutically effective amount of a compound of the invention and a pharmaceutically acceptable carrier, optionally in combination with another anticoagulant agent, as well as to the use of the compns. in the treatment of a thromboembolic disorder. C-Dimethylation of 4-methoxyphenylacetonitrile followed by acid hydrolysis, O-demethylation, esterification, formylation, and bromination gave methylpropanoate II. 3-Bromo-4-methoxybenzonitrile was converted to the corresponding boronic acid, coupled with O-methylated II, and cyclized with 3,4-diaminobenzamidine (preparation in 3 steps from 4-amino-3-nitrobenzonitrile is given) to give dimethoxybiphenylacetate III. Compound III underwent demethylation to the dihydroxybiphenylacetic acid followed by amidation, hydrogenation of the nitrile, acylation with (S)-2,2-dimethyl-1,3-dioxolane-4-carboxylate, and ring cleavage, resulting in the formation of I. The compds. of the invention express inhibition of Factor VIIa and Factor Xa (no data).

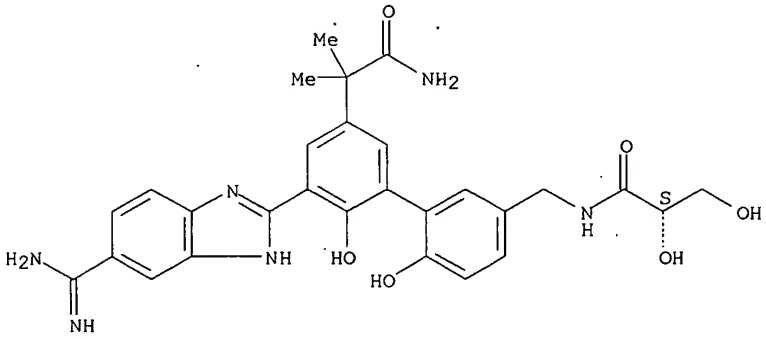
IT **871822-56-9P**

RL: PAC (Pharmacological activity); RCT (Reactant); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent); USES (Uses)
(drug candidate; preparation of dihydroxybiphenylacetamides as Factor VIIa inhibitors)

RN 871822-56-9 CAPLUS

CN [1,1'-Biphenyl]-3-acetamide, 5-[6-(aminoiminomethyl)-1H-benzimidazol-2-yl]-5'-[[[(2S)-2,3-dihydroxy-1-oxopropyl]amino]methyl]-2',6-dihydroxy-α,α-dimethyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

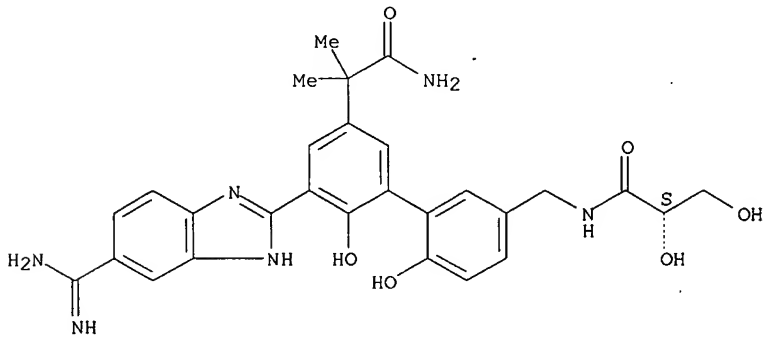


IT **871822-51-4P 871822-57-0P 871822-61-6P**
871822-62-7P 871822-64-9P 871822-65-0P
871822-66-1P 871822-67-2P 871822-68-3P
871822-69-4P 871822-71-8P 871822-72-9P
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(drug candidate; preparation of dihydroxybiphenylacetamides as Factor VIIa inhibitors)

RN 871822-51-4 CAPLUS

CN [1,1'-Biphenyl]-3-acetamide, 5-[6-(aminoiminomethyl)-1H-benzimidazol-2-yl]-5'-[[[(2S)-2,3-dihydroxy-1-oxopropyl]amino]methyl]-2',6-dihydroxy-α,α-dimethyl-, dihydrochloride (9CI) (CA INDEX NAME)

Absolute stereochemistry.

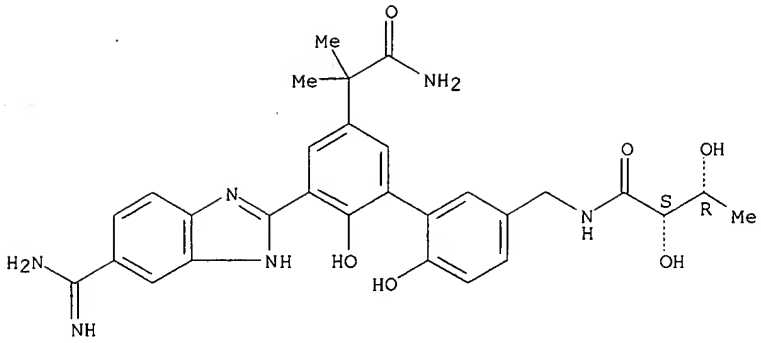


●2 HCl

RN 871822-57-0 CAPLUS

CN [1,1'-Biphenyl]-3-acetamide, 5-[6-(aminoiminomethyl)-1H-benzimidazol-2-yl]-5'-[[[(2S,3R)-2,3-dihydroxy-1-oxobutyl]amino]methyl]-2',6-dihydroxy-α,α-dimethyl-, dihydrochloride (9CI) (CA INDEX NAME)

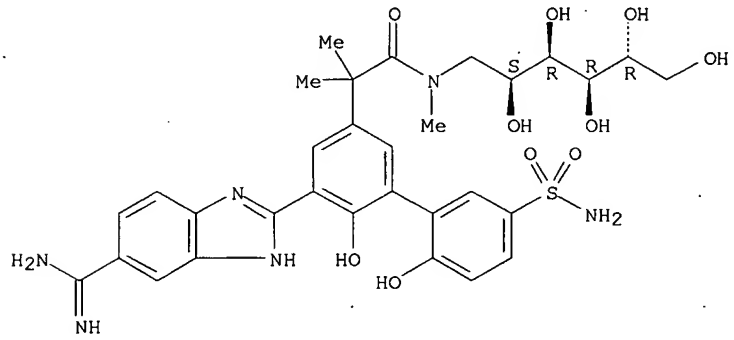
Absolute stereochemistry.



●2 HCl

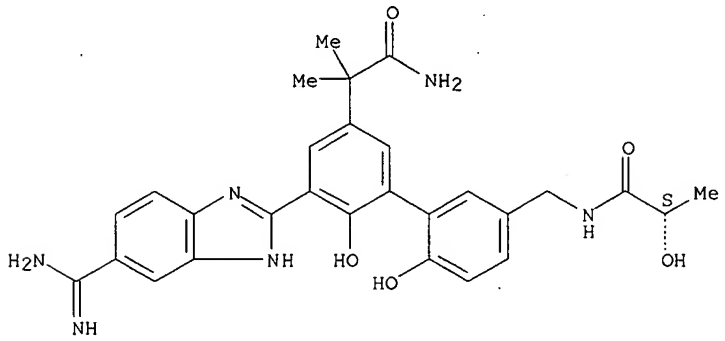
RN 871822-61-6 CAPLUS
CN D-Glucitol, 1-[[2-[5-[5-(aminoiminomethyl)-1H-benzimidazol-2-yl]-5'-(aminosulfonyl)-2',6-dihydroxy[1,1'-biphenyl]-3-yl]-2-methyl-1-oxopropyl]methylamino]-1-deoxy- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



RN 871822-62-7 CAPLUS
CN [1,1'-Biphenyl]-3-acetamide, 5-[6-(aminoiminomethyl)-1H-benzimidazol-2-yl]-2',6-dihydroxy-5'-[[[(2S)-2-hydroxy-1-oxopropyl]amino]methyl]-α,α-dimethyl-, dihydrochloride (9CI) (CA INDEX NAME)

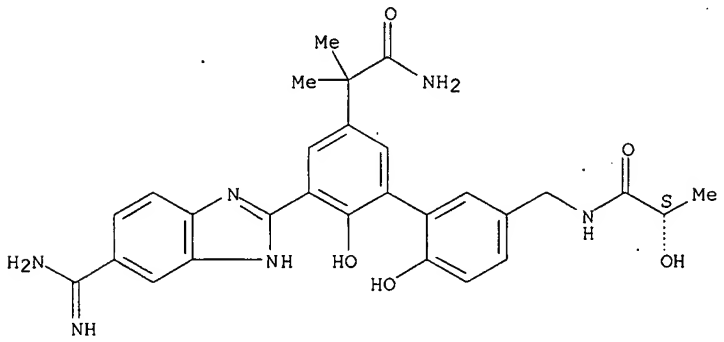
Absolute stereochemistry.



●2 HCl

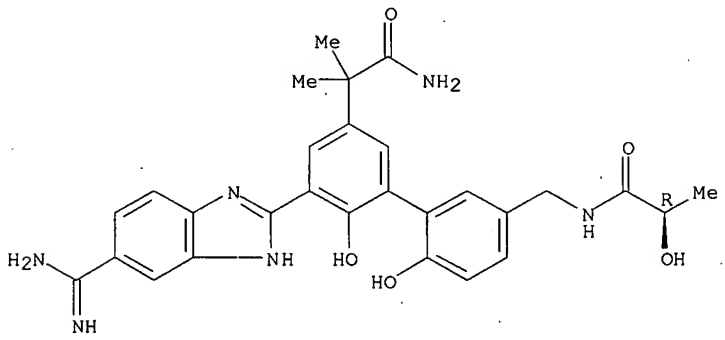
RN 871822-64-9 CAPLUS
CN [1,1'-Biphenyl]-3-acetamide, 5-[6-(aminoiminomethyl)-1H-benzimidazol-2-yl]-2',6-dihydroxy-5'-[[[(2S)-2-hydroxy-1-oxopropyl]amino]methyl]-α,α-dimethyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



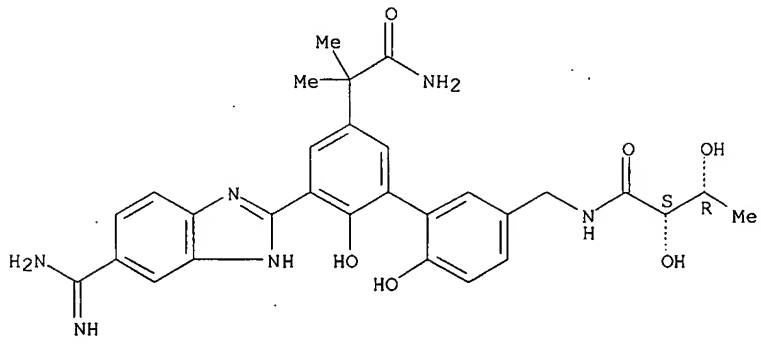
RN 871822-65-0 CAPLUS
CN [1,1'-Biphenyl]-3-acetamide, 5-[6-(aminoiminomethyl)-1H-benzimidazol-2-yl]-2',6-dihydroxy-5'-[[[(2R)-2-hydroxy-1-oxopropyl]amino]methyl]-α,α-dimethyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



RN 871822-66-1 CAPLUS
CN [1,1'-Biphenyl]-3-acetamide, 5-[6-(aminoiminomethyl)-1H-benzimidazol-2-yl]-5'-[[[(2S,3R)-2,3-dihydroxy-1-oxobutyl]amino]methyl]-2',6-dihydroxy-α,α-dimethyl- (9CI) (CA INDEX NAME)

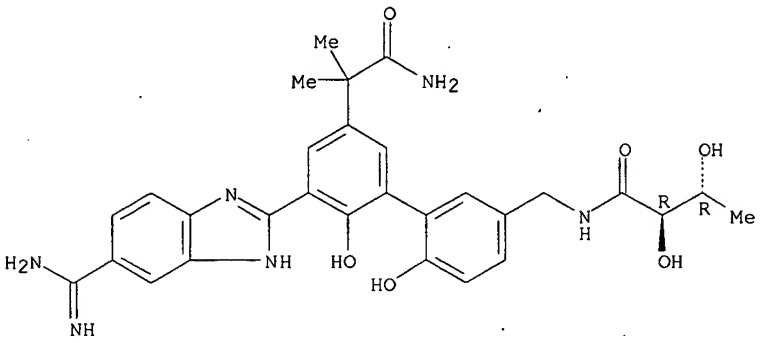
Absolute stereochemistry.



RN 871822-67-2 CAPLUS

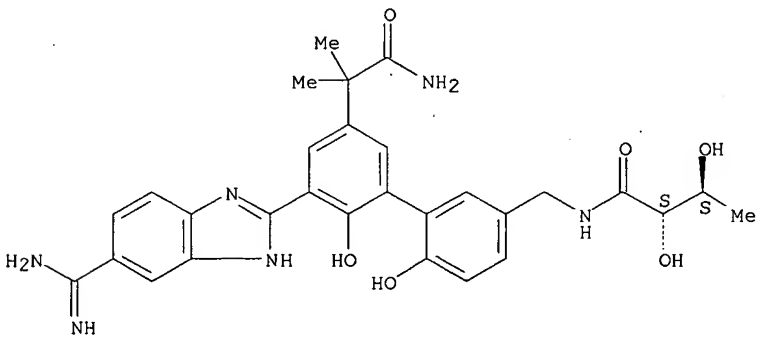
CN [1,1'-Biphenyl]-3-acetamide, 5-[6-(aminoiminomethyl)-1H-benzimidazol-2-yl]-5'-[[[(2R,3R)-2,3-dihydroxy-1-oxobutyl]amino]methyl]-2',6-dihydroxy-α,α-dimethyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



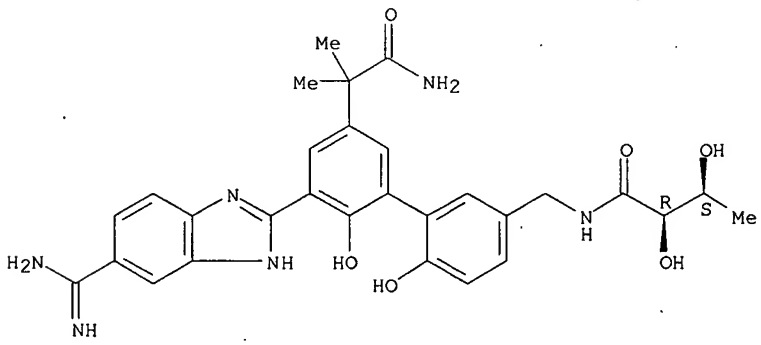
RN 871822-68-3 CAPLUS
CN [1,1'-Biphenyl]-3-acetamide, 5-[6-(aminoiminomethyl)-1H-benzimidazol-2-yl]-5'-[[[(2S,3S)-2,3-dihydroxy-1-oxobutyl]amino]methyl]-2',6-dihydroxy-α,α-dimethyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



RN 871822-69-4 CAPLUS
CN [1,1'-Biphenyl]-3-acetamide, 5-[6-(aminoiminomethyl)-1H-benzimidazol-2-yl]-5'-[[[(2R,3S)-2,3-dihydroxy-1-oxobutyl]amino]methyl]-2',6-dihydroxy-α,α-dimethyl- (9CI) (CA INDEX NAME)

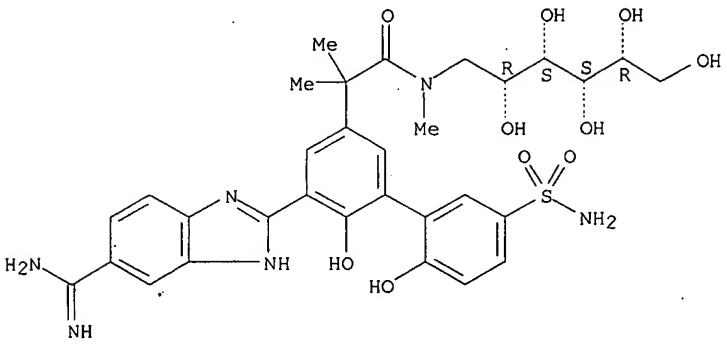
Absolute stereochemistry.



RN 871822-71-8 CAPLUS
CN D-Iditol, 1-[[2-[5-[5-(aminoiminomethyl)-1H-benzimidazol-2-yl]-5'-

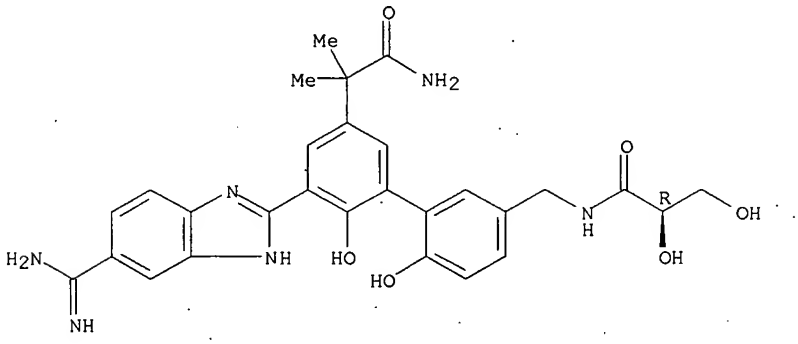
(aminosulfonyl)-2',6-dihydroxy[1,1'-biphenyl]-3-yl]-2-methyl-1-oxopropyl]methylamino]-1-deoxy- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



RN 871822-72-9 CAPLUS
CN [1,1'-Biphenyl]-3-acetamide, 5-[6-(aminoiminomethyl)-1H-benzimidazol-2-yl]-5'-[[[(2R)-2,3-dihydroxy-1-oxopropyl]amino]methyl]-2',6-dihydroxy-α,α-dimethyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



L24 ANSWER 3 OF 68 CAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 2005:1201062 CAPLUS <<LOGINID::20061031>>
DOCUMENT NUMBER: 143:452895
TITLE: Pharmaceutical **dopamine glycoconjugate** compositions as **dopaminergic** receptor binding agents
INVENTOR(S): Christian, Samuel T.; Sundsmo, John S.
PATENT ASSIGNEE(S): USA
SOURCE: U.S. Pat. Appl. Publ., 50 pp., Cont.-in-part of U.S. Ser. 198,798, abandoned.
CODEN: USXXCO
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 4
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 2005250739	A1	20051110	US 2003-625645	20030722
US 6548484	B1	20030415	US 2000-547506	20000412
US 2003119761	A1	20030626	US 2002-198798	20020718
US 2006189547	A1	20060824	US 2006-343266	20060130
PRIORITY APPLN. INFO.:			US 2000-547501	A2 20000412
			US 2000-547506	A2 20000412
			US 2002-198798	B2 20020718

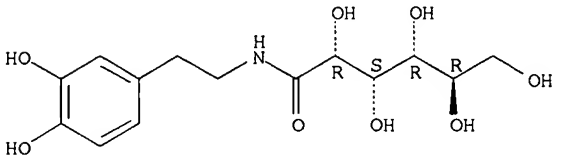
OTHER SOURCE(S): MARPAT 143:452895

AB Hydrophilic transportable N-linked **glycosyl** **dopaminergic** prodrug compds. were prepared and are capable of binding to **dopaminergic** receptors. E.g., **dopamine** **gluconamide** (I) was prepared from gluconolactone and 3-hydroxytyramine. **Dopamine** receptor binding assays were carried out for **dopamine** gluconamine and a isopropylidine protected I. Pharmaceutical formulations were given containing I.

IT **369619-41-0P**, **Dopamine** **gluconamide** **369619-49-8P**
RL: PAC (Pharmacological activity); RCT (Reactant); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent); USES (Uses)
(pharmaceutical **dopamine** **glycoconjugate** compns. as **dopaminergic** receptor binding agents)

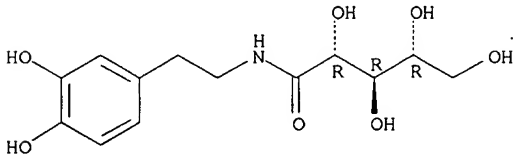
RN 369619-41-0 CAPLUS
CN D-Gluconamide, N-[2-(3,4-dihydroxyphenyl)ethyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



RN 369619-49-8 CAPLUS
CN D-Ribonamide, N-[2-(3,4-dihydroxyphenyl)ethyl]- (9CI) (CA INDEX NAME)

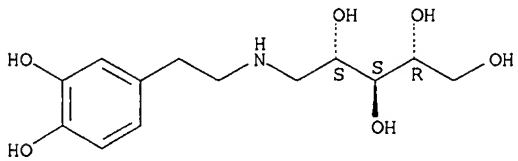
Absolute stereochemistry.



IT **369619-53-4P** **369619-55-6P**
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(pharmaceutical **dopamine** **glycoconjugate** compns. as **dopaminergic** receptor binding agents)

RN 369619-53-4 CAPLUS
CN D-Ribitol, 1-deoxy-1-[[2-(3,4-dihydroxyphenyl)ethyl]amino]-, hydrochloride (9CI) (CA INDEX NAME)

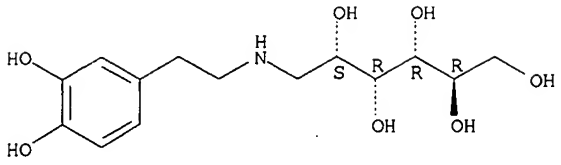
Absolute stereochemistry.



● HCl

RN 369619-55-6 CAPLUS
CN D-Glucitol, 1-deoxy-1-[[2-(3,4-dihydroxyphenyl)ethyl]amino]-, hydrochloride (9CI) (CA INDEX NAME)

Absolute stereochemistry.



● HCl

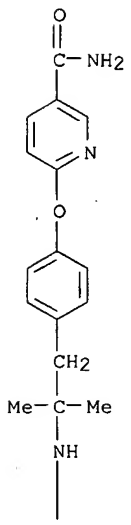
L24 ANSWER 4 OF 68 CAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 2005:1011687 CAPLUS <<LOGINID::20061031>>
DOCUMENT NUMBER: 144:16395
TITLE: Metabolism and disposition of a β3-adrenergic receptor agonist LY368842 in male Fisher 344 rats
AUTHOR(S): Abraham, T. L.; Lindsay, T. J.; Chay, S. H.; Czeskis, B. A.; He, M. M.
CORPORATE SOURCE: Drug Metabolism and Disposition, Lilly Research Laboratories, Eli Lilly and Company, Indianapolis, IN, USA
SOURCE: Xenobiotica (2005), 35(6), 647-660
CODEN: XENOBH; ISSN: 0049-8254
PUBLISHER: Taylor & Francis Ltd.
DOCUMENT TYPE: Journal
LANGUAGE: English

AB The metabolism and disposition of LY368842, a β3-adrenergic receptor agonist, were characterized in F344 rats following oral or i.v. administration of [14C]LY368842. These studies were conducted as part of the investigation of the mechanism of dark liver pigmentation in LY368842-treated F344 rats. The maximum plasma concentration of LY368842 was reached at 3 h after an oral dose, with an elimination half-life of 4 h. The oral bioavailability of LY368842 was determined as 8%. A tissue distribution study by quant. whole-body autoradiog. indicated high concns. of radiocarbon in gastrointestinal contents and moderate concns. in liver. The radiocarbon was rapidly eliminated in rats, with approx. 3% of the dose recovered in urine and 90% in faeces over 168 h. In bile duct-cannulated rats, about 42% of the dose was recovered in bile and 41% remained in the faeces. **Metabolites** of LY368842 were identified in rat urine, faeces, bile and plasma samples. Oxidative metabolism of LY368842 led to the formation of a hydroxy **metabolite**, an indole-2,3-dione **metabolite** and oxidative cleavage products such as amine and diol **metabolites**. Several glucuronide **conjugates** were also identified in rat bile. These data suggest that LY368842 is not completely absorbed but is widely distributed, extensively metabolized and rapidly eliminated in rats after oral administration.

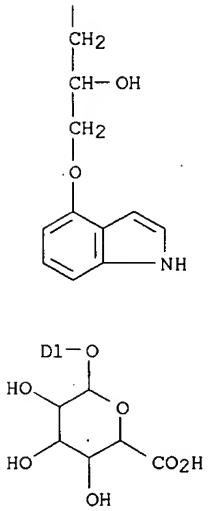
IT **870461-79-3** **870461-80-6**
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(metabolism and disposition of oral or i.v. β3 agonist LY368842 in relation to mechanism of dark liver pigmentation in LY368842 treatment)

RN 870461-79-3 CAPLUS
CN D-Glucopyranosiduronic acid, 4-[(2S)-3-[[2-[4-[[5-(aminocarbonyl)-2-pyridinyl]oxy]phenyl]-1,1-dimethylethyl]amino]-2-hydroxypropoxy]-1H-indol-C-yl (9CI) (CA INDEX NAME)

PAGE 1-A



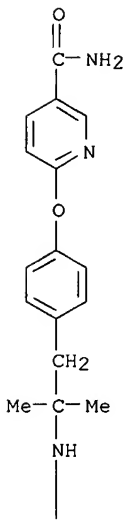
PAGE 2-A



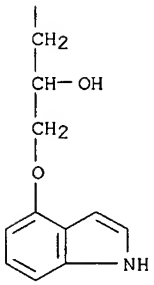
RN 870461-80-6 CAPLUS

CN D-Glucopyranosiduronic acid, 4-[(2S)-3-[[2-[4-[[5-(aminocarbonyl)-2-pyridinyl]oxy]phenyl]-1,1-dimethylethyl]amino]-2-hydroxypropoxy]-1H-indole-C,C-diyl bis- (9CI) (CA INDEX NAME)

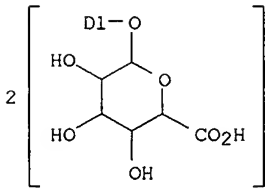
PAGE 1-A



PAGE 2-A



PAGE 3-A



REFERENCE COUNT: 18 THERE ARE 18 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L24 ANSWER 5 OF 68 CAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 2005:395260 CAPLUS <<LOGINID::20061031>>
DOCUMENT NUMBER: 142:447014
TITLE: Preparation of substituted phenoxy aryl amides as β2-adrenoceptor agonists for the treatment of COPD
INVENTOR(S): Box, Philip Charles; Coe, Diane Mary; Hobbs, Heather
PATENT ASSIGNEE(S): Glaxo Group Limited, UK
SOURCE: PCT Int. Appl., 56 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent

LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2005040103	A1	20050506	WO 2004-EP11952	20041020
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
EP 1675823	A1	20060705	EP 2004-790747	20041020
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, CY, TR, BG, CZ, EE, HU, PL, SK, HR				

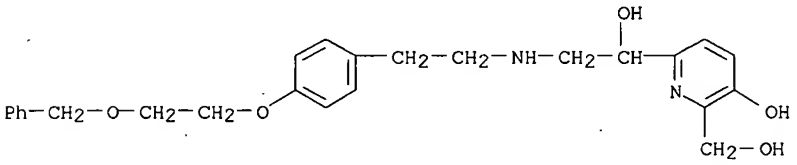
PRIORITY APPLN. INFO.: GB 2003-24654 A 20031022
WO 2004-EP11952 W 20041020

OTHER SOURCE(S): MARPAT 142:447014

AB Title compds. I [n = 1-3; m = 2-4; p = 0-3; Z = O, CH2; R1 = H, alkyl, OH, alkoxy, etc.; X = alkyl, alkenylene; R2 = H, OH, alkyl, alkoxy, etc.; R3 = H, OH, alkyl, alkoxy, etc.; R4-5 = H, alkyl, etc.; R6-7 = H, alkyl] are prepared For instance, II is prepared in 8 steps from N-[5-(bromoacetyl)-2-hydroxyphenyl]**methanesulfonamide**, (S)-phenylglycinol, 3-(bromomethyl)benzonitrile and 4-(2-hydroxyethyl)phenol. Representative compds. have a pEC50 > 6 for the β2-adrenoceptor. I are useful in the treatment of asthma or chronic obstructive pulmonary disease (COPD).

IT **851091-78-6P**
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(preparation of substituted phenoxy aryl amides as β2-adrenoceptor agonists for treatment of COPD)

RN 851091-78-6 CAPLUS
CN 2,6-Pyridinedimethanol, 3-hydroxy-α6-[[[2-[4-[2-(phenylmethoxy)ethoxy]phenyl]ethyl]amino]methyl]- (9CI) (CA INDEX NAME)



REFERENCE COUNT: 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L24 ANSWER 6 OF 68 CAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 2005:120747 CAPLUS <<LOGINID::20061031>>
DOCUMENT NUMBER: 142:219283
TITLE: Preparation of 1H-imidazo[4,5-c]pyridin-2-yl derivatives as inhibitors of Akt activity
INVENTOR(S): Heerding, Dirk A.; Clark, Tammy J.; Drewry, David H.; Leber, Jack Dale; Safonov, Igor; Yamashita, Dennis S.
PATENT ASSIGNEE(S): Smithkline Beecham Corporation, USA
SOURCE: PCT Int. Appl., 212 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE

WO 2005011700		A1	20050210	WO 2004-US24340	20040728
	W:	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW			
	RW:	BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG			
AU 2004261214		A1	20050210	AU 2004-261214	20040728
CA 2534038		AA	20050210	CA 2004-2534038	20040728
EP 1653961		A1	20060510	EP 2004-779406	20040728
	R:	AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, CY, TR, BG, CZ, EE, HU, PL, SK, HR			
BR 2004012993		A	20061003	BR 2004-12993	20040728
NO 2006000985		A	20060419	NO 2006-985	20060228
PRIORITY APPLN. INFO.:				US 2003-490851P	P 20030729
				US 2003-491055P	P 20030730
				US 2003-493101P	P 20030806
				US 2003-494752P	P 20030813
				US 2003-507014P	P 20030929
				US 2003-530847P	P 20031218
				WO 2004-US24340	W 20040728

OTHER SOURCE(S): MARPAT 142:219283

AB Title compds. I [wherein Het = 4-furazan-3-yl, 4-pyridinyl, 2-aminopyridin-4-yl, 2-amino-pyrimidin-5-yl, etc.; R1 = H, (un)substituted alkyl, cycloalkyl containing 1-4 heteroatoms; R4 = H, halo, (un)substituted alkyl, cycloalkyl, poly/cyclic aromatic ring; R7 = H, CONR9R10 and derivs., SO2NR9R10 and derivs., N(CH2)mNR9R10etc.; m = 6, where the carbon chain formed by m is optionally substituted; R9, R10 = independently H, (un)substituted alkyl, cycloalkyl etc.; with the exception of one compound; and their pharmaceutically acceptable salts, hydrates, solvates, and prodrugs] were prepared as inhibitors of protein kinase B activity. For example, II•xTFA was prepared via cyclocondensation of N-(1-Benzylpiperidin-4-yl)-2-chloropyridin-3,4-diamine (preparation given) with Et cyanoacetate, followed by Pd-coupling with Ph boronic acid, reaction with NaNO2 and NH2OH of acetonitrile intermediate, and Bn-deprotection. In an Akt inhibitory activity assay, III displayed IC50 values of 0.069, 0.038, and 0.032, against delta-PH domain of Akt1, Akt2, and Akt3, resp. Thus, I are useful in the treatment of cancer and arthritis (no data).

IT **842147-64-2P**, 4-[(1R)-2-[[3-[[2-(4-Amino-1,2,5-oxadiazol-3-yl)-1-ethyl-4-phenyl-1H-imidazo[4,5-c]pyridin-7-yl]oxy]-2-hydroxypropyl]amino]-1-hydroxyethyl]-1,2-benzenediol trifluoroacetate
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(Akt inhibitor; preparation of 1H-imidazo[4,5-a]pyridin-2-yl derivs. as inhibitors of Akt activity for treating cancer and arthritis)

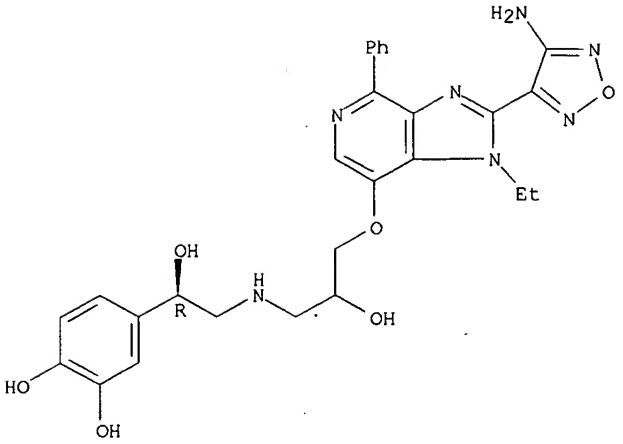
RN 842147-64-2 CAPLUS

CN 1,2-Benzenediol, 4-[(1R)-2-[[3-[[2-(4-amino-1,2,5-oxadiazol-3-yl)-1-ethyl-4-phenyl-1H-imidazo[4,5-c]pyridin-7-yl]oxy]-2-hydroxypropyl]amino]-1-hydroxyethyl]-, trifluoroacetate (salt) (9CI) (CA INDEX NAME)

CM 1

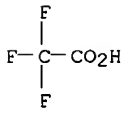
CRN 842147-63-1
CMF C27 H29 N7 O6

Absolute stereochemistry.



CM 2

CRN 76-05-1
CMF C2 H F3 O2



REFERENCE COUNT: 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L24 ANSWER 7 OF 68 CAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 2004:647395 CAPLUS <<LOGINID::20061031>>
DOCUMENT NUMBER: 141:254710
TITLE: G-protein coupled receptors: SAR analyses of neurotransmitters and antagonists
AUTHOR(S): Kuo, C. L.; Wang, R. B.; Shen, L. J.; Lien, L. L.; Lien, E. J.
CORPORATE SOURCE: School of Pharmacy, University of Southern California, Los Angeles, CA, USA
SOURCE: Journal of Clinical Pharmacy and Therapeutics (2004), 29(3), 279-298
CODEN: JCPTED; ISSN: 0269-4727
PUBLISHER: Blackwell Publishing Ltd.
DOCUMENT TYPE: Journal
LANGUAGE: English

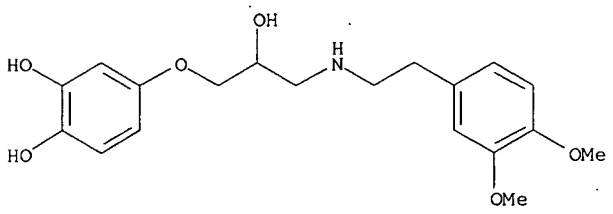
AB Background: From the deductive point of view, neurotransmitter receptors can be divided into categories such as cholinergic (muscarinic, nicotinic), adrenergic (α- and β-), **dopaminergic**, serotoninergic (5-HT1.apprx.5-HT5), and histaminergic (H1 and H2). Selective agonists and antagonists of each receptor subtype can have specific useful therapeutic applications. For understanding the mol. mechanisms of action, an inductive method of anal. is useful. Objective: The aim of the present study is to examine the structure-activity relationships of agents acting on G-protein coupled receptors. Method: Representative sets of G-PCR agonists and antagonists were identified from the literature and Medline [P.M. Walsh (2003) Physicians' desk reference; M.J. O'Neil (2001) The Merck index]. The mol. weight (MW), calculated logarithm of octanol/water partition coefficient (C log P) and molar refraction (CMR), dipole moment (DM), Elumo (the energy of the LUMO, a measure of the electron affinity of a mol. and its reactivity as an electrophile), Ehomo (the energy of the HOMO, related to the ionization potential of a mol., and its reactivity as a nucleophile), and the total number of hydrogen bonds (Hb) (donors and receptors), were chosen as mol. descriptors for SAR

analyses. Results: The data suggest that not only do neurotransmitters share common structural features but their receptors belong to the same ensemble of G-protein coupled receptor with seven to eight transmembrane domains with their resultant dipoles in an antiparallel configuration. Moreover, the anal. indicates that the receptor exists in a dynamic equilibrium between the closed state and the open state. The energy needed to open the closed state is provided by the hydrolysis of GTP. A composite 3-D parameter frame setting of all the neurotransmitter agonists and antagonists are presented using MW, Hb and μ as independent variables. Conclusion: It appears that all neurotransmitters examined in this study operate by a similar mechanism with the G-protein coupled receptors.

IT **74513-77-2**, Ro363
RL: PRP (Properties)
(structure-activity relationship anal. of neurotransmitters and G protein-coupled receptor antagonists)

RN 74513-77-2 CAPLUS

CN 1,2-Benzenediol, 4-[3-[[2-(3,4-dimethoxyphenyl)ethyl]amino]-2-hydroxypropoxy]- (9CI) (CA INDEX NAME)



REFERENCE COUNT: 31 THERE ARE 31 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L24 ANSWER 8 OF 68 CAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2004:571465 CAPLUS <<LOGINID::20061031>>

DOCUMENT NUMBER: 141:408422

TITLE: Diversity and distribution of Microcystis (cyanobacteria) oligopeptide chemotypes from natural communities studied by single-colony mass spectrometry

AUTHOR(S): Welker, Martin; Brunke, Matthias; Preussel, Karina; Lippert, Indra; Von Doehren, Hans

CORPORATE SOURCE: Inst. Chemie, AG Biochemie und molekulare Biologie, Technische Universitaet Berlin, Berlin, 10587, Germany

SOURCE: Microbiology (Reading, United Kingdom) (2004), 150(6), 1785-1796
CODEN: MROBEO; ISSN: 1350-0872

PUBLISHER: Society for General Microbiology

DOCUMENT TYPE: Journal

LANGUAGE: English

AB Microcystis sp. has been recognized in recent years as a producer of a high number of secondary **metabolites.** Among these, peptides that are produced by the nonribosomal peptide synthetase pathway often show bioactivity or are toxic to humans. The production of particular peptides is specific for individual Microcystis clones, allowing their characterization as chemotypes by analyzing the peptidome. The authors studied the in situ diversity of peptides and chemotypes in Microcystis communities from lakes in and around Berlin, Germany, by direct anal. of individual colonies by MALDI-TOF mass spectrometry. From 165 colonies analyzed a total of 46 individual peptides could be identified, 21 of which have not been described previously. For six of the new peptides the structures could be elucidated from fragment patterns, while for others only a preliminary classification could be achieved. In most colonies, two to ten individual peptides were detected. In 19 colonies, 16 of which were identified as M. wesenbergii, no peptide **metabolites** could be detected. The peptide data of 146 colonies were subjected to an ordination (principal component anal.). The principal components were clearly formed by the microcystin variants Mcyst-LR, -RR and -YR, anabaenopeptins B and E/F, a putative microviridin, and a new cyanopeptolin. In the resulting ordination plots most colonies were grouped into five distinct groups, while 40 colonies scattered widely outside these groups. In some cases colonies from different lakes

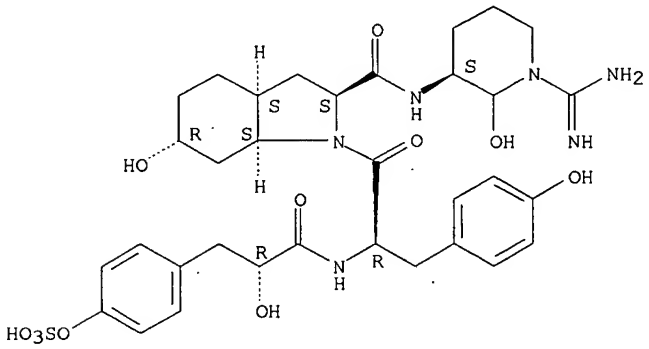
clustered closely, indicating the presence of similar chemotypes in the resp. samples. With respect to colony morphol. no clear correlation between a chemotype and a morphospecies could be established, but M. aeruginosa, for example, was found to produce predominantly microcystins. In contrast, M. ichthyoblabe colonies were mostly neg. for microcystins and instead produced anabaenopeptins. The number of peptides detected in a limited number of samples and the various combinations of peptides in individual Microcystis colonies highlights the immense metabolic potential and diversity of this genus.

IT **173357-14-7**, Aeruginosin 102A
RL: ANT (Analyte); BSU (Biological study, unclassified); PRP (Properties); ANST (Analytical study); BIOL (Biological study)
(diversity and distribution of Microcystis oligopeptide chemotypes from natural communities from lakes studied by single-colony mass spectrometry)

RN 173357-14-7 CAPLUS

CN 1H-Indole-2-carboxamide, N-[(3S)-1-(aminoiminomethyl)-2-hydroxy-3-piperidinyl]octahydro-6-hydroxy-1-[(2R)-2-[[(2R)-2-hydroxy-1-oxo-3-[4-(sulfooxy)phenyl]propyl]amino]-3-(4-hydroxyphenyl)-1-oxopropyl]-, (2S,3aS,6R,7aS)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.
Currently available stereo shown.



REFERENCE COUNT: 53 THERE ARE 53 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L24 ANSWER 9 OF 68 CAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 2004:493686 CAPLUS <<LOGINID::20061031>>
DOCUMENT NUMBER: 141:54342
TITLE: Preparation of 2-(2-hydroxybiphenyl-3-yl)-1H-benzimidazole-5-carboxamidine derivatives as factor VIIa inhibitors
INVENTOR(S): Kolesnikov, Aleksandr; Rai, Roopa; Shrader, William Dvorak; Torkelson, Steven M.; Wesson, Kieron E.; Young, Wendy B. .
PATENT ASSIGNEE(S): Axys Pharmaceuticals, Inc., USA
SOURCE: PCT Int. Appl., 119 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2004050637	A2	20040617	WO 2003-US38635	20031203
WO 2004050637	A3	20040902		

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW
RW: BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ,

BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

CA 2507707	AA	20040617	CA 2003-2507707	20031203
AU 2003302238	A1	20040623	AU 2003-302238	20031203
EP 1569912	A2	20050907	EP 2003-810056	20031203
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK				
CN 1745070	A	20060308	CN 2003-80109503	20031203
JP 2006515839	T2	20060608	JP 2004-557602	20031203
US 2006205942	A1	20060914	US 2006-537115	20060320
PRIORITY APPLN. INFO.:			US 2002-430981P P	20021203
			WO 2003-US38635 W	20031203

OTHER SOURCE(S): MARPAT 141:54342

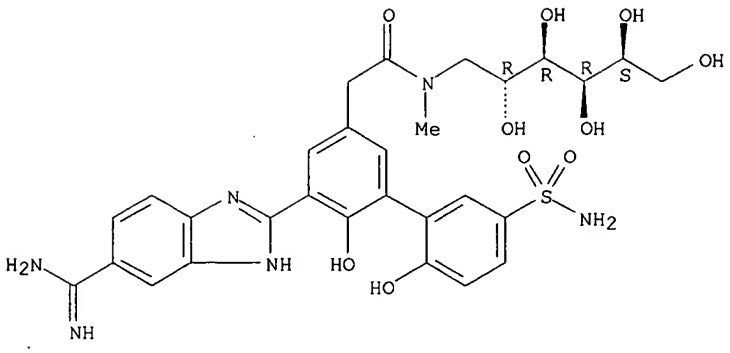
AB The title compds. (I) [X1-X4 = independently N or CR5 (wherein R5 = H, alkyl, or halo) with the proviso that not more than three of X1-X4 are N; R1 = H, alkyl, halo, CO2H, CONH2; R2 = H, alkyl, halo; R3 = H, halo, alkyl, alkoxy, haloalkyl, haloalkoxy, haloalkylthio, haloalkylsulfonyl, cyanoalkyl, tetrazol-5-yl, tetrazol-5-ylalkyl, hydroxyalkylcarbonyl, aminosulfonyl, alkylaminosulfonyl, dialkylaminosulfonyl, oxalyl, NHSO2R (where R = alkyl, aryl, aralkyl, heteroaryl, heteroaralkyl, cycloalkyl, cycloalkylalkyl, heterocycloalkyl or heterocycloalkylalkyl), SO2NHCOR6 (where R6 = alkyl, aryl, aralkyl, heteroaryl, heteroaralkyl, heterocycloalkyl, or heterocycloalkylalkyl), SO3H, sulfonylalkyl, each N-(un)substituted CONH2, CH(CF3)NH2, or COCONH2; Rx = H, alkyl, alkylthio, halo, HO, hydroxyalkyl, alkoxy, SO2NH2, alkylaminosulfonyl, dialkylaminosulfonyl, NO2; Ry = H, alkyl, halo; Rz = H, alkyl, haloalkyl, cycloalkyl, alkylthio, halo, HO, hydroxyalkyl, nitro, cyano, alkoxy, alkoxyalkyl, alkoxyalkyloxy, hydroxyalkyloxy, aminoalkyloxy, carboxyalkyloxy, aminocarbonylalkyloxy, haloalkoxy, CO2H, etc.; R13 = H, HO, C1-10 alkoxy, COR35 (where R35 = alkyl, aryl, haloalkyl, or cyanoalkyl), CO2R36 (where R36 = alkyl, hydroxyalkyl, alkoxyalkyl, alkoxycarbonylalkyl, acyl, aryl, or haloalkyl)] and individual isomers, mixture of isomers, or pharmaceutically acceptable salts thereof are prepared These compds. are novel inhibitors of factors VIIa, IXa, Xa, XIa, in particular factor VIIa (no data). Pharmaceutical compns. comprising these inhibitors are useful for treating a disease in an animal mediated by factor VIIa, thromboembolic disorders, cancer or rheumatoid arthritis, in particular thromboembolic disorders. Thus, 1-tert-butyl-3-[[3'-formyl-6,2'-bis(2-methoxyethoxymethoxy)biphenyl-3-yl]methyl]urea, 3,4-diaminobenzamidine hydrochloride, and 1,4-benzoquinone were combined in methanol, heated at 60°, and stirred for 2 h to give 2-[5'-(3-tert-butylureidomethyl)-2,2'-bis(2-methoxyethoxymethoxy)biphenyl-3-yl]-1H-benzimidazole-5-carboximidamide which was dissolved in 4 M hydrogen chloride in dioxane and the solution and stirred at room temperature for 1 h to give 2-(2,2'-dihydroxy-5'-ureidomethylbiphenyl-3-yl)-1H-benzimidazole-5-carboximidamide hydrochloride.

IT **706821-92-3P**, 2-[5-(5-Carbamimidoyl-1H-benzimidazol-2-yl)-6,2'-dihydroxy-5'-sulfamoylbiphenyl-3-yl]-N-methyl-N-((2R,3R,4R,5S)-2,3,4,5,6-pentahydroxyhexyl)acetamide **706822-33-5P**
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(preparation of (hydroxybiphenylyl)-1H-benzimidazolecarboxamidine derivs. as factor VIIa inhibitors for treating thromboembolic disorders, cancer, or rheumatoid arthritis)

RN 706821-92-3 CAPLUS

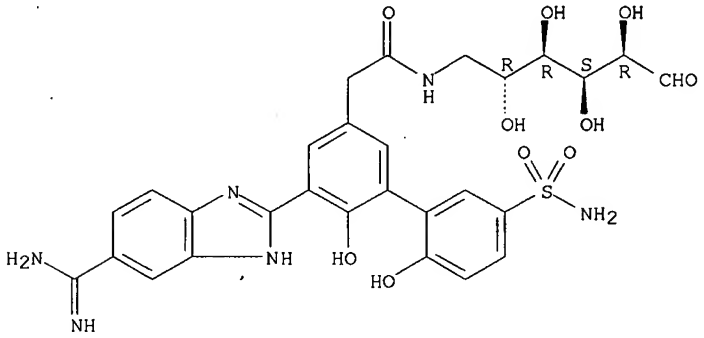
CN D-Glucitol, 6-[[[5-[5-(aminoiminomethyl)-1H-benzimidazol-2-yl]-5'-(aminosulfonyl)-2',6-dihydroxy[1,1'-biphenyl]-3-yl]acetyl]methylamino]-6-deoxy- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



RN 706822-33-5 CAPLUS
CN D-Glucose, 6-[[[5-[5-(aminoiminomethyl)-1H-benzimidazol-2-yl]-5'-(aminosulfonyl)-2',6-dihydroxy[1,1'-biphenyl]-3-yl]acetyl]amino]-6-deoxy-(9CI) (CA INDEX NAME)

Absolute stereochemistry.



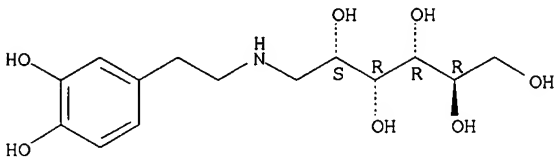
L24 ANSWER 10 OF 68 CAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 2004:460342 CAPLUS <<LOGINID::20061031>>
DOCUMENT NUMBER: 142:48941
TITLE: **Dopaminergic** properties and experimental anti-parkinsonian effects of IPX750 in rodent models of Parkinson disease
AUTHOR(S): Jiang, Chuantao; Wan, Xinhua; Jankovic, Joseph; Christian, Samuel T.; Pristupa, Zdenek B.; Niznik, Hyman B.; Sundsmo, John S.; Le, Weidong
CORPORATE SOURCE: Parkinson Disease Research Lab, Department of Neurology, Baylor College of Medicine, Houston, TX, USA
SOURCE: Clinical Neuropharmacology (2004), 27(2), 63-73
CODEN: CLNEDB; ISSN: 0362-5664
PUBLISHER: Lippincott Williams & Wilkins
DOCUMENT TYPE: Journal
LANGUAGE: English

AB With a view toward improving the neural bioavailability of administered **dopaminergic** compds., including **dopamine**, synthetic efforts have been directed toward enhancing the brain bioavailability of these compds. by accessing cellular sugar transport systems with stereoselective **dopaminergic** drugs. While synthesis and chemical of the resultant class of compds. has recently been described in US Patent No.6,548,484, the associated biol. properties have not previously been reported. One member of this new class, IPX-750, is a pro-drug **dopamine**-gluconamine designed to retain stereospecificity of binding at: glucose transporters (GLUT 1/ GLUT 3 and intestinal Na+/glucose co-transporters SGLT1), **dopamine** transporter (DAT); and, **dopaminergic** receptors of the D1/D2 families. Designed to be cleavable by tissue amidases, results reported here show that intact IPX-750 pro-drug retains **dopaminergic** agonist binding and biol.

activities both in vitro and in vivo. IPX-750, like **dopamine**, exhibited predominant D5/D1 binding specificity with lower binding activity at D2. As expected, binding was highly stereospecific, ie, IPX-760, a benzamide differing in just a hydrogen atom and keto oxygen from IPX-750, bound with 6-fold lower activity at D5. In cell culture, activation resulted from binding of IPX-750 at D1 or D5 in transfected cells was measured by increased intracellular cAMP. Interestingly, considering prior reported in vitro toxicity of **dopamine** oxidized and metabolic product **dopamine**, no evidence of in vitro toxicity was observed at up to 72 h in cell cultures at the EC50 of IPX-750 for increasing intracellular cAMP. IPX-750 was evaluated in the Parkinson's disease animal models, including MPTP mouse model, the 6-hydroxydopamine (6-OHDA) rat model and the Nurr1 (+/-) knockout mouse model. In MPTP-lesioned and Nurr1 +/- knockout mice, IPX-750 significantly increased Rota-rod time. In 6-OHDA-lesioned rats, IPX-750 significantly decreased apomorphine (APO)-induced rotation. Worthy of note, after cessation of IPX-750 treatments the anti-parkinsonian activity in MPTP-lesioned and Nurr1 +/- mice required about 2 wk to washout, suggesting a possible biol. reservoir of drug. In addition, after eight weeks of twice daily administration of 20 mg/kg IPX-750, mice did not show statistical difference in the total number of TH-pos. neurons in substantia nigra (SN). These combined results suggest (i) that stereospecific **glycoconjugation** may be an effective method to improve penetrability of drugs through the blood brain barrier; (ii) treatment with bioavailable IPX-750 in vitro did not show evidence for neurotoxicity; and, (iii) IPX-750 possesses **dopaminergic** properties and exerts anti-parkinsonian effects in three different PD rodent models, suggesting therapeutic potential for this new class of drugs in treating **dopamine** deficiency diseases.

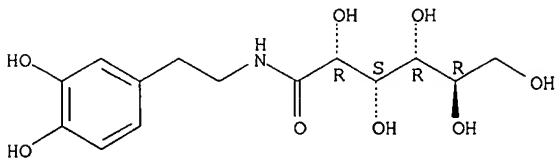
IT **369619-47-6**, IPX 750
RL: DMA (Drug mechanism of action); PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(IPX-750 exhibited D5/D1 binding specificity, lower D2 binding activity and increased Rota-rod time in MPTP, Nurr1(+/-) mouse and decreased APO-induced rotation in 6-OHDA rat model indicate it possess **dopaminergic**, antiparkinsonian activity)
RN 369619-47-6 CAPLUS
CN D-Glucitol, 1-deoxy-1-[[2-(3,4-dihydroxyphenyl)ethyl]amino]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



IT **369619-41-0**, IPX 760
RL: DMA (Drug mechanism of action); PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(IPX-760 (**dopamine-gluconamide**) exhibited lower D5 binding activity compared to IPX-750 in MPTP, Nurr1(+/-) mouse)
RN 369619-41-0 CAPLUS
CN D-Gluconamide, N-[2-(3,4-dihydroxyphenyl)ethyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



REFERENCE COUNT: 62 THERE ARE 62 CITED REFERENCES AVAILABLE FOR THIS

RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

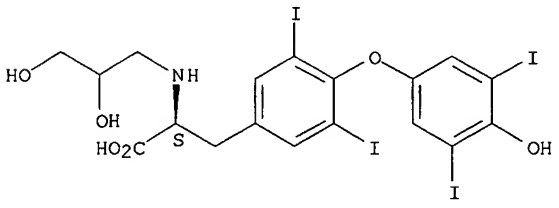
L24 ANSWER 11 OF 68 CAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 2004:259783 CAPLUS <<LOGINID::20061031>>
DOCUMENT NUMBER: 142:89007
TITLE: Polymeric affinity type of adsorbents in the study of physiologically active substances. Part XX. Synthesis and use of iodine derivatives of phenolphthalein and tyrosine in affinity chromatography of human blood serum proteins
AUTHOR(S): Polenok, E. G.; Kuznetsov, P. V.
CORPORATE SOURCE: Siberian Division, Kemerovo Scientific Center, Cancer Immunology Department, Russian Academy of Sciences, Kemerovo, Russia
SOURCE: Pharmaceutical Chemistry Journal (Translation of Khimiko-Farmatsevticheskii Zhurnal) (2003), 37(12), 663-666
CODEN: PCJOAU; ISSN: 0091-150X
PUBLISHER: Kluwer Academic/Consultants Bureau
DOCUMENT TYPE: Journal
LANGUAGE: English

AB The designing of original affinity type adsorbents (ATAs) with immobilized derivs. of phenolphthalein and tyrosine for the purification of thyroxine-binding proteins was studied. The ligands for epoxy-activated ATAs were phenolphthalein hydrazide (PPH), tetraiodophenolpthalein hydrazide (TIPPH), and 3,5-diiodotyrosine (DIT). The chromatog. characteristics of epoxy-activated ATAs with immobilized DIT are comparable with those of the classical adsorbents with immobilized T4. The epoxy-activated ATAs with immobilized TIPPH are less selective with respect to adsorbed proteins. These systems can be used as group adsorbents for the isolation and purification of blood serum proteins.

IT **816454-45-2DP**, **conjugate** with agarose
816454-49-6DP, **conjugate** with agarose
RL: ARU (Analytical role, unclassified); BUU (Biological use, unclassified); SPN (Synthetic preparation); ANST (Analytical study); BIOL (Biological study); PREP (Preparation); USES (Uses)
(iodine derivs. of phenolphthalein and tyrosine in affinity chromatog. of human blood serum proteins)

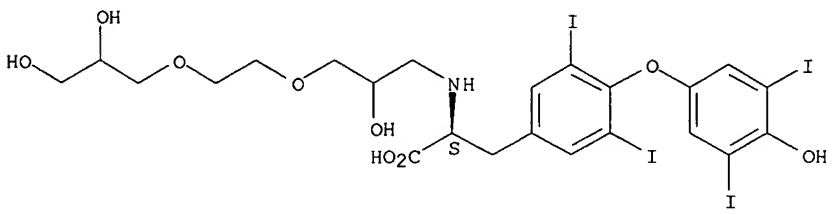
RN 816454-45-2 CAPLUS
CN L-Tyrosine, N-(2,3-dihydroxypropyl)-O-(4-hydroxy-3,5-diiodophenyl)-3,5-diiodo- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



RN 816454-49-6 CAPLUS
CN L-Tyrosine, N-[3-[2-(2,3-dihydroxypropoxy)ethoxy]-2-hydroxypropyl]-O-(4-hydroxy-3,5-diiodophenyl)-3,5-diiodo- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



REFERENCE COUNT: 15 THERE ARE 15 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L24 ANSWER 12 OF 68 CAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 2004:2903 CAPLUS <<LOGINID::20061031>>
DOCUMENT NUMBER: 140:65211
TITLE: Prodrug, medicinal utilization thereof, and process for producing the same
INVENTOR(S): Yamashita, Shinya; Takeo, Jiro; Okita, Takaaki
PATENT ASSIGNEE(S): Nippon Suisan Kaisha, Ltd., Japan
SOURCE: PCT Int. Appl., 48 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2004000863	A1	20031231	WO 2003-JP7868	20030620
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
CA 2490626	AA	20031231	CA 2003-2490626	20030620
AU 2003244088	A1	20040106	AU 2003-244088	20030620
BR 2003012442	A	20050510	BR 2003-12442	20030620
EP 1541579	A1	20050615	EP 2003-760921	20030620
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK				
CN 1671724	A	20050921	CN 2003-817814	20030620
US 2005203061	A1	20050915	US 2005-505961	20050419
PRIORITY APPLN. INFO.:			JP 2002-180238 A	20020620
			WO 2003-JP7868 W	20030620

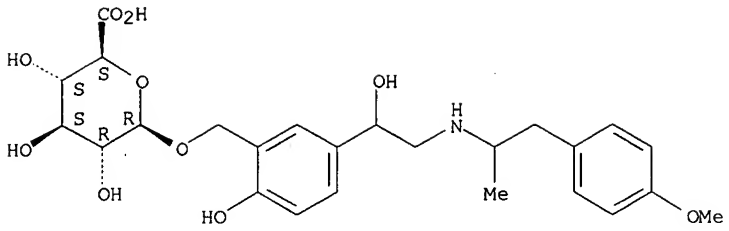
AB Disclosed is a prodrug with the use of an enzyme showing different enzymic activities between a drug target site and a site where its side effect is expressed, which has a substituent cleavable with the enzyme and is activated due by cleaving the substituent. As an example of the drug target site, a respiratory organ may be cited, while the heart may be sited as an example of the side effect expression site. As an example of the drug, a bronchodilator may be cited while a **glycosidase** (for example, β-glucuronidase) may be cited as an example of the enzyme. As an example of the substituent, a **glycosyl** group comprising a monosaccharide or an oligosaccharide may be cited. Use of the above enzyme makes it possible to lessen the side effect of a drug having a target site for exerting its effect which is different from a site where its side effect is expressed. Salbutamol glucuronide was prepared and administered to guinea pigs by inhalation to study pharmacol. effects.

IT **639007-21-9P**
RL: SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(preparation of enzyme-activated prodrugs for targeting respiratory systems)

RN 639007-21-9 CAPLUS

CN β-D-Glucopyranosiduronic acid, [2-hydroxy-5-[1-hydroxy-2-[[2-(4-methoxyphenyl)-1-methylethyl]amino]ethyl]phenyl]methyl (9CI) (CA INDEX NAME)

Absolute stereochemistry.



REFERENCE COUNT: 85 THERE ARE 85 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L24 ANSWER 13 OF 68 CAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 2003:875267 CAPLUS <<LOGINID::20061031>>
DOCUMENT NUMBER: 139:350761
TITLE: Preparation of 1,1-dioxo-5-phenyl-2,3,4,5-tetrahydro-1,2,5-benzothiadiazepines as ileal bile acid transport inhibitors for treatment of hyperlipidemia
INVENTOR(S): Starke, Ingemar; Dahlstrom, Mikael Ulf Johan; Nordberg, Mats Peter; Alenfalk, Suzanne; Wallberg, Andreas Christer; Bostrom, Stig Jonas
PATENT ASSIGNEE(S): Astrazeneca Ab, Swed.; Astrazeneca Uk Limited
SOURCE: PCT Int. Appl., 71 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2003091232	A2	20031106	WO 2003-GB1742	20030423
WO 2003091232	A3	20031224		
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
CA 2483155	AA	20031106	CA 2003-2483155	20030423
AU 2003226565	A1	20031110	AU 2003-226565	20030423
EP 1501813	A2	20050202	EP 2003-747171	20030423
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK				
BR 2003009493	A	20050209	BR 2003-9493	20030423
US 2005143368	A1	20050630	US 2003-511984	20030423
CN 1662514	A	20050831	CN 2003-814359	20030423
JP 2005531537	T2	20051020	JP 2003-587792	20030423
ZA 2004008548	A	20051114	ZA 2004-8548	20041021
NO 2004004597	A	20041027	NO 2004-4597	20041025
PRIORITY APPLN. INFO.:			GB 2002-9467 A	20020425
			WO 2003-GB1742 W	20030423

OTHER SOURCE(S): MARPAT 139:350761

AB Title compds. I [wherein Rv = H, alkyl; R1 = H, alkyl when R2 = alkyl; R2 = H, alkyl when R1 = alkyl; Rx, Ry = independently H, OH and derivs., NH2 and derivs., SH, alkyl, alkylS(O)a; a = 0-2; Rz = halo, NO2, CN, OH and derivs., NH2 and derivs., carboxy, carbamoyl, mercapto, sulphamoyl, alk(en/yn)yl, etc.; n = 0-5; one of R4 and R5 = -X-Y-C(O)-N(R8)-(CAR9R10); R3 and R6 and the other of R4 and R5 = independently H, halo, NO2, CN, OH and derivs., NH2 and derivs., SH, sulphamoyl and derivs., (un)substituted alk(en/yn)yl, etc.; X = O, NH and derivs., CH2 and derivs., S(O)b; b = 0-2; A = C-(un)substituted (hetero)aryl; Y = (CHR7)q; R7 = H, (un)substituted alkyl, carbocyclyl, C- or N-(un)substituted heterocyclyl; q = 1-3; R8 = H, alkyl; R9 = H, alkyl; R10 = H, halo, NO2, NH2 and derivs., OH and derivs., CN, SH, (un)substituted alk(en/yn)yl,

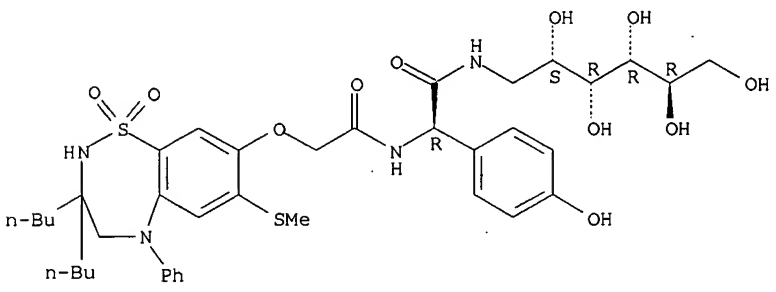
carbocyclyl, C- or N-(un)substituted heterocyclyl, etc.; their stereoisomers, geometric isomers, tautomers, pharmaceutically acceptable salts, solvates, solvates of such salts and prodrugs] were prepared as ileal bile acid transport (IBAT) inhibitors (no data) for treatment of hyperlipidemia (no data). For example, II was prepared, in 59% yield, by condensation of benzothiadiazepine III (preparation given) with (D)-glucamine in the presence of N-methylmorpholine/TBTU/DMF.

IT **549501-83-9P**, 1,1-Dioxo-3,3-dibutyl-5-phenyl-7-methylthio-8-N-[(R)-[α-[N-[2-(S)-3-(R)-4-(R)-5-(R)-2,3,4,5,6-pentahydroxyhexyl]carbamoyl]-4-hydroxybenzyl]carbamoylmethoxy]-2,3,4,5-tetrahydro-1,2,5-benzothiadiazepine
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(ileal bile acid transport inhibitor; preparation of benzothiadiazepines as ileal bile acid transport inhibitors for treatment of hyperlipidemia)

RN 549501-83-9 CAPLUS

CN D-Glucitol, 1-deoxy-1-[[(2R)-[[[[3,3-dibutyl-2,3,4,5-tetrahydro-7-(methylthio)-1,1-dioxido-5-phenyl-1,2,5-benzothiadiazepin-8-yl]oxy]acetyl]amino](4-hydroxyphenyl)acetyl]amino]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



L24 ANSWER 14 OF 68 CAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 2003:696859 CAPLUS <<LOGINID::20061031>>
DOCUMENT NUMBER: 139:230480
TITLE: Preparation of substituted amines prodrugs useful in treating Alzheimer's disease
INVENTOR(S): Varghese, John; Jagodzinska, Barbara; Maillard, Michel; Beck, James P.; Tenbrink, Ruth E.; Getman, Daniel
PATENT ASSIGNEE(S): Elan Pharmaceuticals, Inc., USA; Pharmacia & Upjohn
SOURCE: PCT Int. Appl., 483 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2003072535	A2	20030904	WO 2003-US7287	20030227
WO 2003072535	C1	20040930		
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
CA 2477607	AA	20030904	CA 2003-2477607	20030227
AU 2003225730	A1	20030909	AU 2003-225730	20030227
EP 1503980	A2	20050209	EP 2003-743271	20030227
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,				

IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK

BR 2003007998	A	20050628	BR 2003-7998		20030227
JP 2005519082	T2	20050630	JP 2003-571242		20030227
NO 2004004046	A	20041115	NO 2004-4046		20040924
US 2006106256	A1	20060518	US 2005-505947		20050926
PRIORITY APPLN. INFO.:			US 2002-359953P	P	20020227
			WO 2003-US7287	W	20030227

OTHER SOURCE(S): MARPAT 139:230480

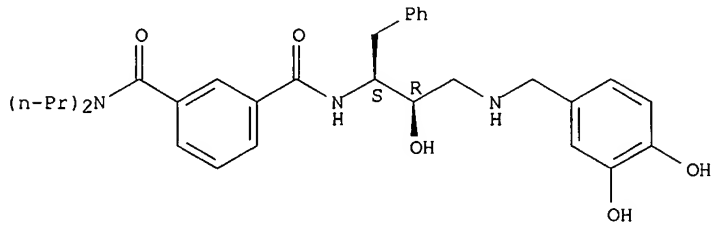
AB Amines [I; R1 = (un)substituted alkyl, alkenyl, alkynyl, etc.; R2 = H, (un)substituted alkyl, alkenyl, etc.; R3 = H, (un)substituted alkyl, alkenyl, etc.; R4 = XR; X = CO, SO2, a bond, etc.; R = Ph, naphthyl, indanyl, etc.; R5 = (un)substituted alkyl, (CH2)0-3cycloalkyl, etc.; e.g. N1-[(1S,2R)-1-(3,5-difluorobenzyl)-2-hydroxy-3-[(3-methoxybenzyl)amino]propyl]-5-methyl-N3,N3-dipropylisophthalamide], useful in treating Alzheimer's disease and other similar diseases, were prepared Although the methods of preparation are not claimed, hundreds of example prepns. are included. Thus, reacting (2R,3S)-3-amino-4-(3,5-difluorophenyl)-1-[(3-methoxybenzyl)amino]-2-butanol trifluoroacetate with 5-methyl-N,N-dipropylisophthalamic acid in the presence of Et3N, 1-hydroxybenzotriazole and 1-(3-dimethylaminopropyl)-3-ethylcarbodiimide hydrochloride in DMF afforded (1S,2R)-II (N1-[(1S,2R)-1-(3,5-difluorobenzyl)-2-hydroxy-3-[(3-methoxybenzyl)amino]propyl]-5-methyl-N3,N3-dipropylisophthalamide). The compds. I exhibit an IC50 of < 50 μM against β-secretase.

IT **388062-83-7P**, N-[(1S,2R)-1-Benzyl-3-[(3,4-dihydroxybenzyl)amino]-2-hydroxypropyl]-N',N'-dipropylisophthalamide
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(drug candidate; preparation of substituted amine prodrugs useful in treating Alzheimer's disease)

RN 388062-83-7 CAPLUS

CN 1,3-Benzenedicarboxamide, N'-[(1S,2R)-3-[[(3,4-dihydroxyphenyl)methyl]amino]-2-hydroxy-1-(phenylmethyl)propyl]-N,N-dipropyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



L24 ANSWER 15 OF 68 CAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER:	2003:532332 CAPLUS <<LOGINID::20061031>>
DOCUMENT NUMBER:	139:90477
TITLE:	Anti-infective agent formulations containing carbohydrate moieties
INVENTOR(S):	Christian, Samuel T.
PATENT ASSIGNEE(S):	USA
SOURCE:	U.S. Pat. Appl. Publ., 24 pp., Cont.-in-part of U.S. 6,548,484. CODEN: USXXCO
DOCUMENT TYPE:	Patent
LANGUAGE:	English
FAMILY ACC. NUM. COUNT:	4
PATENT INFORMATION:	

PATENT NO.	KIND	DATE	APPLICATION NO.		DATE
US 2003130205	A1	20030710	US 2002-274798		20021021
US 6548484	B1	20030415	US 2000-547506		20000412
US 2006189547	A1	20060824	US 2006-343266		20060130
PRIORITY APPLN. INFO.:			US 2000-547501	B2	20000412

US 2000-547506 A2 20000412

OTHER SOURCE(S): MARPAT 139:90477

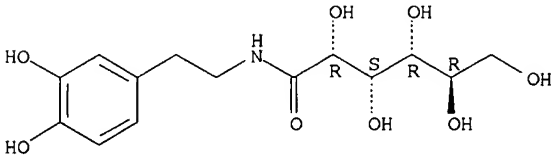
AB Hydrophilic N-linked pharmaceutical compns., methods of their preparation and use in drug delivery are described. The formulations comprise a **glycosyl** CNS acting anti-infective prodrug compound covalently N-linked with a saccharide through an amide or an amine bond and a formulation consisting of an additive, a stabilizer, a carrier, a binder, a buffer, an excipient, an emollient, a disintegrant, a lubricating agent, with the proviso that the saccharide moiety is not a cyclodextrin or a glucuronide. Thus, thus, **dopamine gluconamide** was prepared by the reaction of gluconolactone with 3-hydroxytyramine. Tablets contained **dopamine gluconamide** 2.5, methylparaben 0.014, propylparaben 0.020, saccharin sodium 0.050, flavoring agent 0.001, citric acid 0.200, and sodium citrate 0.320 g, and water to 100 mL.

IT **369619-41-0P 369619-47-6P**
RL: SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(anti-infective agent formulations containing carbohydrate moieties)

RN 369619-41-0 CAPLUS

CN D-Gluconamide, N-[2-(3,4-dihydroxyphenyl)ethyl]- (9CI) (CA INDEX NAME)

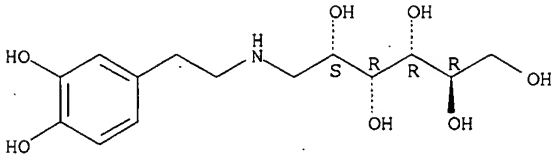
Absolute stereochemistry.



RN 369619-47-6 CAPLUS

CN D-Glucitol, 1-deoxy-1-[[2-(3,4-dihydroxyphenyl)ethyl]amino]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



L24 ANSWER 16 OF 68 CAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2003:492692 CAPLUS <<LOGINID::20061031>>

DOCUMENT NUMBER: 139:57966

TITLE: Preparation of pharmaceuticals containing carbohydrate moieties

INVENTOR(S): Christian, Samuel T.

PATENT ASSIGNEE(S): USA

SOURCE: U.S. Pat. Appl. Publ., 32 pp., Cont.-in-part of U.S. Ser. No. 547,506.
CODEN: USXXCO

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 4

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 2003119761	A1	20030626	US 2002-198798	20020718
US 6548484	B1	20030415	US 2000-547506	20000412
US 2005250739	A1	20051110	US 2003-625645	20030722
PRIORITY APPLN. INFO.:			US 2000-547506	A2 20000412
			US 2000-547501	A2 20000412
			US 2002-198798	B2 20020718

OTHER SOURCE(S): MARPAT 139:57966

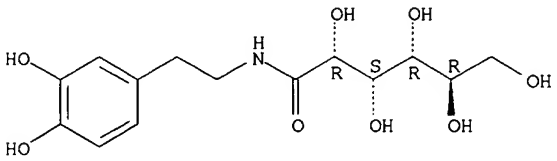
AB Hydrophilic N-linked pharmaceutical compns., methods of their preparation and use in drug delivery comprise a **glycosyl** CNS acting prodrug compound covalently N-linked with a saccharide through an amide or an amine bond and a formulary consisting of an additive, a stabilizer, a carrier, a binder, a buffer, an excipient, an emollient, a disintegrant, a lubricating agent, an antimicrobial agent or a preservative, with the proviso that the saccharide moiety is not a cyclodextrin or a glucuronide. Gluconolactone and 3-hydroxytryamine were reacted slowly in methanol to form a white solid **dopamine gluconamide** precipitant. The product was collected by filtration, washing and drying in vacuo. Tablets for oral administration were prepared from the **dopamine gluconamide** 250, starch 17, sodium starch glycolate 40, PVP 7.0, microcryst. cellulose 45, and Mg stearate 2.0 mg.

IT **369619-41-0P 369619-47-6P**
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(preparation of pharmaceuticals containing carbohydrate moieties)

RN 369619-41-0 CAPLUS

CN D-Gluconamide, N-[2-(3,4-dihydroxyphenyl)ethyl]- (9CI) (CA INDEX NAME)

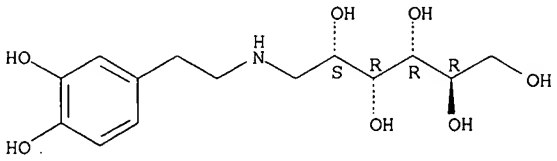
Absolute stereochemistry.



RN 369619-47-6 CAPLUS

CN D-Glucitol, 1-deoxy-1-[[2-(3,4-dihydroxyphenyl)ethyl]amino]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



L24 ANSWER 17 OF 68 CAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2003:302327 CAPLUS <<LOGINID::20061031>>

DOCUMENT NUMBER: 139:332270

TITLE: Stereoselective urinary excretion of formoterol and its glucuronide **conjugate** in human

AUTHOR(S): Zhang, Mei; Fawcett, J. Paul; Shaw, John P.

CORPORATE SOURCE: Department of Clinical Pharmacology, Christchurch School of Medicine, University of Otago, Dunedin, New Caledonia

SOURCE: British Journal of Clinical Pharmacology (2002), 54(3), 246-250
CODEN: BCPHBM; ISSN: 0306-5251

PUBLISHER: Blackwell Publishing Ltd.

DOCUMENT TYPE: Journal

LANGUAGE: English

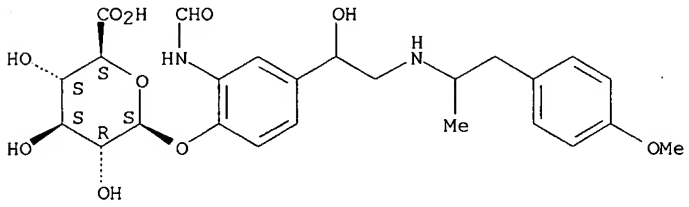
AB Formoterol is an inhaled β2-adrenoceptor agonist used as a racemic mixture of the active (R,R)- and inactive (S,S)-enantiomers (rac-formoterol). Glucuronidation is an important route of metabolism in humans which occurs faster for (S,S)-formoterol in human liver microsomes. The aim of this study was to investigate the stereoselectivity of urinary excretion of formoterol and its glucuronide **conjugate** after oral dosing with rac-formoterol. Seven nonsmoking volunteers (six males, one

female) were included in the study. After an overnight fast, a single 60 μg oral dose of rac-formoterol fumarate dihydrate was ingested. Urine samples were collected at 1 h intervals for the first 4 h, and at 6, 8, 12 and 24 h after dosing. Formoterol enantiomers were analyzed by chiral h.p.l.c. assay and formoterol glucuronides were determined as formoterol enantiomers after enzymic cleavage with β-glucuronidase. The female subject displayed a different pattern of metabolism and statistical anal. was therefore limited to data for the six males. The median (range) of the total urinary excretion of formoterol was 37.8% (20.9-51.2%) of the dose. The medians (ranges) of the amts. of (R,R)- and (S,S)-formoterol and of (R,R)-and (S,S)-formoterol glucuronide excreted were 2.1 (1.0-2.9), 3.5 (2.6-3.8), 21.0 (13.1-31.0) and 10.3 (4.2-14.6%), resp., of the dose. Unchanged (S,S)-formoterol excretion was significantly greater than that of unchanged (R,R)-formoterol and (R,R)-formoterol glucuronide excretion was significantly greater than that of (S,S)-formoterol glucuronide. The total R,R-formoterol (unchanged drug plus glucuronide) excreted was significantly greater than the total (S,S)-formoterol. Our study demonstrates that the urinary excretion of formoterol in male humans after oral administration of rac-formoterol is stereoselective with preferential excretion of the active (R,R)-formoterol as unchanged drug and glucuronide. The different pattern of metabolism in the female subject provides impetus for further studies of the effect of gender on the stereoselective metabolism and pharmacokinetics of formoterol.

IT **87833-62-3** **615551-58-1** **615551-59-2**
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(stereoselective urinary excretion of formoterol and its glucuronide **conjugate** in human)

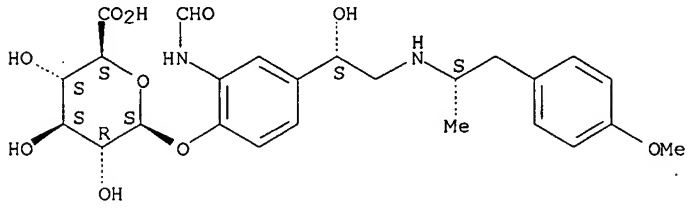
RN 87833-62-3 CAPLUS
CN β-D-Glucopyranosiduronic acid, 2-(formylamino)-4-[1-hydroxy-2-[[2-(4-methoxyphenyl)-1-methylethyl]amino]ethyl]phenyl (9CI) (CA INDEX NAME)

Absolute stereochemistry.



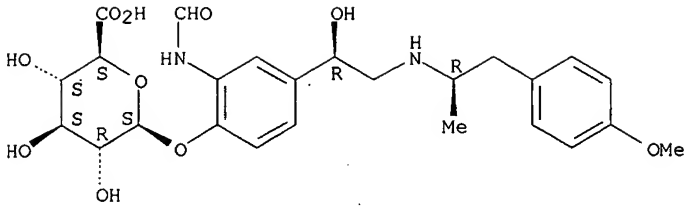
RN 615551-58-1 CAPLUS
CN β-D-Glucopyranosiduronic acid, 2-(formylamino)-4-[(1S)-1-hydroxy-2-[[(1S)-2-(4-methoxyphenyl)-1-methylethyl]amino]ethyl]phenyl (9CI) (CA INDEX NAME)

Absolute stereochemistry.



RN 615551-59-2 CAPLUS
CN β-D-Glucopyranosiduronic acid, 2-(formylamino)-4-[(1R)-1-hydroxy-2-[[(1R)-2-(4-methoxyphenyl)-1-methylethyl]amino]ethyl]phenyl (9CI) (CA INDEX NAME)

Absolute stereochemistry.



REFERENCE COUNT: 12 THERE ARE 12 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L24 ANSWER 18 OF 68 CAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 2002:676031 CAPLUS <<LOGINID::20061031>>
DOCUMENT NUMBER: 137:201528
TITLE: Preparation of avermectins substituted in the 4"-position having pesticidal properties
INVENTOR(S): Pitterna, Thomas; O'Sullivan, Anthony Cornelius; Lutz, William
PATENT ASSIGNEE(S): Syngenta Participations A.-G., Switz.
SOURCE: PCT Int. Appl., 73 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2002068441	A2	20020906	WO 2002-EP2043	20020226
WO 2002068441	A3	20031127		
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZM, ZW				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
EG 23124	A	20040428	EG 2002-203	20020219
CA 2435494	AA	20020906	CA 2002-2435494	20020226
EP 1389216	A2	20040218	EP 2002-727332	20020226
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR				
CN 1494549	A	20040505	CN 2002-805769	20020226
BR 2002007652	A	20040601	BR 2002-7652	20020226
JP 2004523562	T2	20040805	JP 2002-567951	20020226
NZ 527596	A	20041224	NZ 2002-527596	20020226
ZA 2003005519	A	20040428	ZA 2003-5519	20030717
US 2004082525	A1	20040429	US 2003-468684	20030820
US 2006105970	A1	20060518	US 2005-319686	20051228
PRIORITY APPLN. INFO.:			CH 2001-374	A 20010227
			WO 2002-EP2043	W 20020226
			US 2003-468684	A1 20030820

OTHER SOURCE(S): MARPAT 137:201528

AB What is described are **glycoside** aminodeoxy disaccharides I in which, R1 is C1-C12alkyl, C3-C8cycloalkyl or C2-C12alkenyl; R2 is H, unsubstituted or mono- to penta-substituted C1-C12alkyl or unsubstituted or mono- to penta-substituted C1-C12alkenyl; R3 is C2-C12alkyl, mono- to penta-substituted C1-C12alkyl, un-substituted or mono- to penta-substituted C1-C6alkoxy-C1-C6alkyl, unsubstituted or mono- to penta-substituted C3-C12cycloalkyl, C2-C12alkenyl, C2-C12alkynal; or R2 and R3 together are an alkylene or alkenylene bridge; with the provision that R1 is not sec-Bu or iso-Pr if R2 is H and R3 is 2-hydroxyethyl, iso-Pr, n-octyl or benzyl; or, if appropriate, in E/Z isomer, an E/Z isomer mixture and/or a tautomer thereof; a process for preparing and using these compds. and their tautomers; pesticides whose active compound is selected from these compds. and their tautomers; and a process for preparing

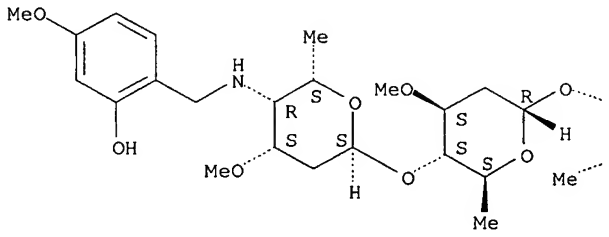
these compds. and compns., and the use of these compds. and compns. Thus, I (R1 = sec-Bu, R2 = H, R3 = 3-pyridylmethyl) was prepared, purified by HPLC, and tested as crop pesticide against Spodoptera littoralis, Heliothis virescens, Frankliniella occidentalis, and Tetranychus urticae.

IT **453569-54-5P 453569-55-6P 453569-92-1P 453569-93-2P**
RL: BSU (Biological study, unclassified); IMF (Industrial manufacture); PUR (Purification or recovery); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation)
(preparation and HPLC purification of avermectins substituted in the 4"-position having pesticidal properties)

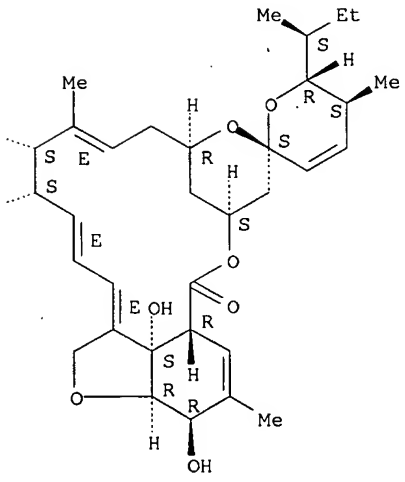
RN 453569-54-5 CAPLUS
CN Avermectin A1a, 5-O-demethyl-4''-deoxy-4''-[[(2-hydroxy-4-methoxyphenyl)methyl]amino]-, (4''R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.
Double bond geometry as shown.

PAGE 1-A



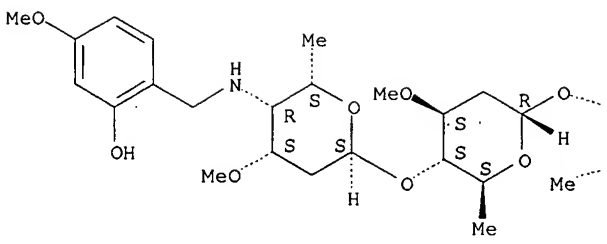
PAGE 1-B



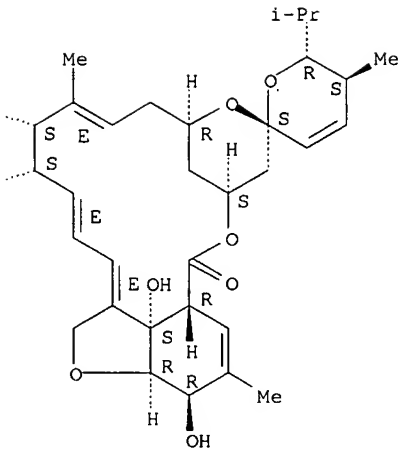
RN 453569-55-6 CAPLUS
CN Avermectin A1a, 5-O-demethyl-25-de(1-methylpropyl)-4''-deoxy-4''-[[(2-hydroxy-4-methoxyphenyl)methyl]amino]-25-(1-methylethyl)-, (4''R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.
Double bond geometry as shown.

PAGE 1-A



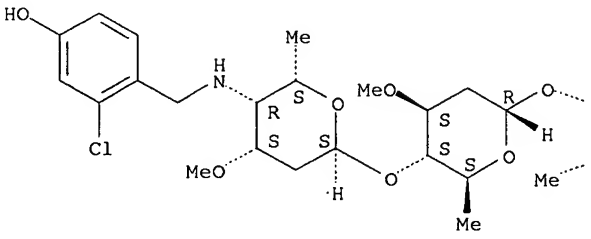
PAGE 1-B



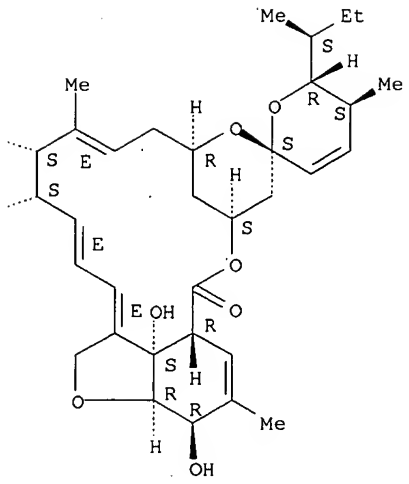
RN 453569-92-1 CAPLUS
CN Avermectin Ala, 4''-[[(2-chloro-4-hydroxyphenyl)methyl]amino]-5-O-demethyl-4''-deoxy-, (4''R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.
Double bond geometry as shown.

PAGE 1-A



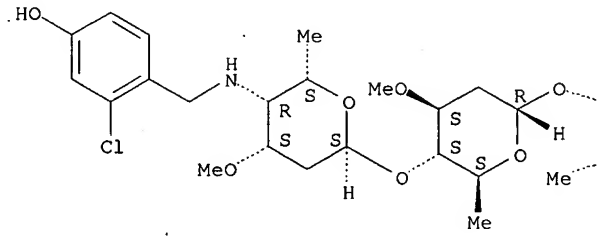
PAGE 1-B



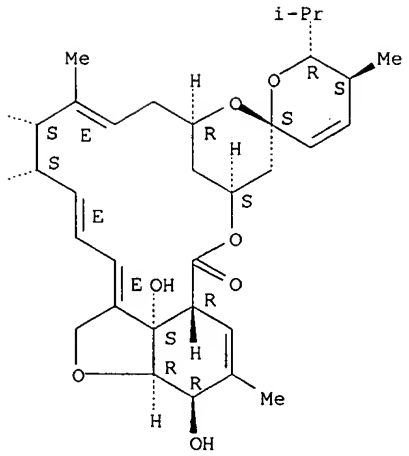
RN 453569-93-2 CAPLUS
CN Avermectin A1a, 4''-{[(2-chloro-4-hydroxyphenyl)methyl]amino}-5-O-demethyl-25-de(1-methylpropyl)-4''-deoxy-25-(1-methylethyl)-, (4''R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.
Double bond geometry as shown.

PAGE 1-A



PAGE 1-B



L24 ANSWER 19 OF 68 CAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 2002:10442 CAPLUS <<LOGINID::20061031>>
DOCUMENT NUMBER: 136:85762
TITLE: New aryl-, quinolyl-, and other heterocyclyl-containing amino alcohol derivatives useful as β3 adrenergic receptor agonists
INVENTOR(S): Kayakiri, Hiroshi; Sakurai, Minoru; Washizuka, Kenichi; Hamashima, Hitoshi; Tomishima, Yasuyo; Fujii, Naoaki; Taniguchi, Kiyoshi
PATENT ASSIGNEE(S): Fujisawa Pharmaceutical Co., Ltd., Japan
SOURCE: PCT Int. Appl., 121 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2002000622	A2	20020103	WO 2001-JP5425	20010625
WO 2002000622	A3	20020829		

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG

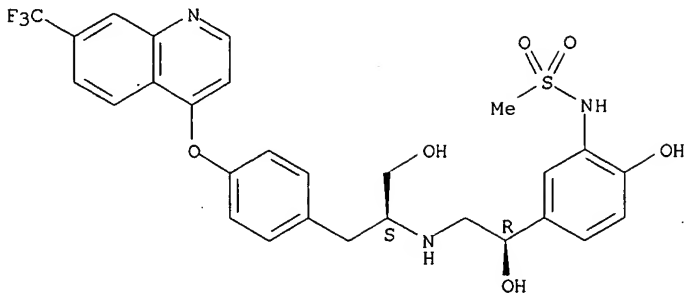
PRIORITY APPLN. INFO.: AU 2000-8413 A 20000627
OTHER SOURCE(S): MARPAT 136:85762

AB The invention relates to compds. I [wherein: X1 = bond or OCH2; X2 = (CH2)1-2; X3 = bond, O, or NH; R1 = (un)substituted Ph, indolyl, or carbazolyl [substituents = 1 or 2 of OH, halo, NO2, amino, formyl, (lower)alkylsulfonylamino, aryl(lower)alkoxy, and hydroxy(lower)alkyl]; R2 = H or aryl(lower)alkyl; R3 = H or hydroxy(lower)alkyl; R4 = (un)substituted aryl, 4-quinolyl, phthalazinyl, quinazolinyl, cinnolinyl, or naphthyridinyl; with provisos], or their pharmaceutically acceptable salts. The compds. are β3 adrenergic receptor agonists, and therefore have gut sympathomimetic, antiulcer, anti-pancreatitis, lipolytic, and smooth muscle relaxant activities. In particular, I and salts are useful for the prophylactic and/or the therapeutic treatment of pollakiuria or urinary incontinence. Sixty precursor prepns. and 63 invention examples, including well over 200 invention compds., are provided. For example, the structure of claimed compound II is typical. Another invention compound, phthalazine derivative III, was prepared from 4-((2S)-2-amino-3-hydroxypropyl)phenol HCl, benzaldehyde, (2S)-3-phenoxy-1,2-epoxypropane, and 1-chlorophthalazine, in 4 steps. III at 0.32 mg/kg (intraduodenal) in beagle dogs gave 35.9% inhibition of carbachol-induced increase in intravesical pressure.

IT **386208-24-8P**, N-[2-Hydroxy-5-[(1R)-1-hydroxy-2-[N-[(1S)-2-hydroxy-1-[4-[N-[7-(trifluoromethyl)-4-quinolyl]oxy]benzyl]ethyl]amino]ethyl]phenyl]**methanesulfonamide** **386208-25-9P**, N-[2-Hydroxy-5-[(1R)-1-hydroxy-2-[N-[(1S)-2-hydroxy-1-[4-[(7-methoxy-4-quinolyl)oxy]benzyl]ethyl]amino]ethyl]phenyl]**methanesulfonamide** **386208-26-0P**, N-[5-[(1R)-2-[N-[(1S)-1-[4-[(7-Fluoro-4-quinolyl)oxy]benzyl]-2-hydroxyethyl]amino]-1-hydroxyethyl]-2-hydroxyphenyl]**methanesulfonamide** **386209-50-3P**, 4-[4-[(2S)-2-[N-[(2R)-2-(3-Chlorophenyl)-2-hydroxyethyl]amino]-3-hydroxypropyl]phenoxy]-N-(2-hydroxyethyl)-8-quinolinecarboxamide dihydrochloride
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(drug candidate; preparation of aryl- and quinolyl-containing amino alcs. and analogs as β3-adrenergic receptor agonists)

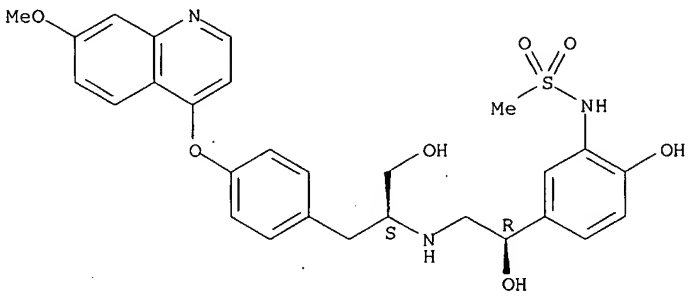
RN 386208-24-8 CAPLUS
CN Methanesulfonamide, N-[2-hydroxy-5-[(1R)-1-hydroxy-2-[[(1S)-1-(hydroxymethyl)-2-[4-[[7-(trifluoromethyl)-4-quinolinyl]oxy]phenyl]ethyl]amino]ethyl]phenyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



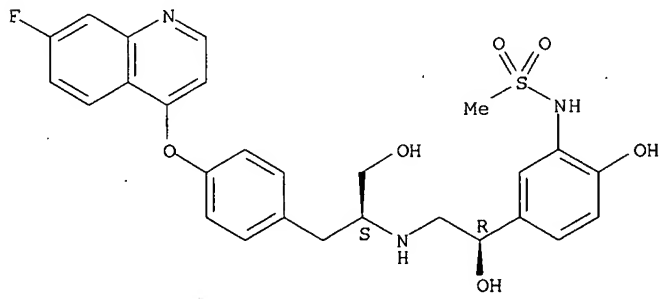
RN 386208-25-9 CAPLUS
CN Methanesulfonamide, N-[2-hydroxy-5-[(1R)-1-hydroxy-2-[[(1S)-2-hydroxy-1-[[4-[(7-methoxy-4-quinolinyl)oxy]phenyl]methyl]ethyl]amino]ethyl]phenyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



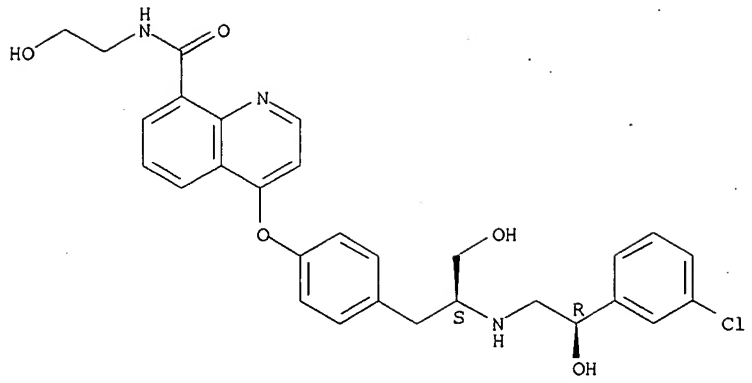
RN 386208-26-0 CAPLUS
CN Methanesulfonamide, N-[5-[(1R)-2-[[(1S)-2-[4-[(7-fluoro-4-quinolinyl)oxy]phenyl]-1-(hydroxymethyl)ethyl]amino]-1-hydroxyethyl]-2-hydroxyphenyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



RN 386209-50-3 CAPLUS
CN 8-Quinolinecarboxamide, 4-[4-[(2S)-2-[[(2R)-2-(3-chlorophenyl)-2-hydroxyethyl]amino]-3-hydroxypropyl]phenoxy]-N-(2-hydroxyethyl)-, dihydrochloride (9CI) (CA INDEX NAME)

Absolute stereochemistry.



●2 HCl

L24 ANSWER 20 OF 68 CAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 2001:886152 CAPLUS <<LOGINID::20061031>>
DOCUMENT NUMBER: 136:6292
TITLE: Preparation of hygromycin A derivatives for the treatment of bacterial and protozoal infections
INVENTOR(S): Hayward, Matthew Merrill; Linde, Robert Gerald, II; Kaneko, Takushi; Visser, Michael Scott
PATENT ASSIGNEE(S): Pfizer Products Inc., USA
SOURCE: PCT Int. Appl., 112 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2001092280	A1	20011206	WO 2001-IB946	20010525
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
CA 2410643	AA	20011206	CA 2001-2410643	20010525
EP 1287011	A1	20030305	EP 2001-934231	20010525
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR				
BR 2001011242	A	20030603	BR 2001-11242	20010525
JP 2003535100	T2	20031125	JP 2002-500893	20010525
EE 200200671	A	20040816	EE 2002-671	20010525
US 2003045528	A1	20030306	US 2001-872731	20010601
US 6867230	B2	20050315		
BG 107265	A	20030731	BG 2002-107265	20021112
NO 2002005704	A	20021127	NO 2002-5704	20021127
PRIORITY APPLN. INFO.:			US 2000-209023P P	20000602
			WO 2001-IB946 W	20010525

OTHER SOURCE(S): MARPAT 136:6292

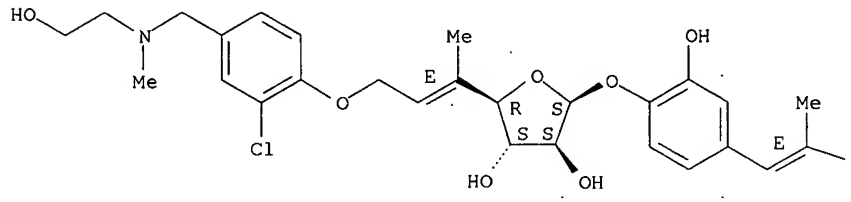
AB Compds. I wherein R and R1 are independently H, OH; R2 is H, alkyl; R3 independently (un)substituted aryl, heteroarom., aminoalkyl, were prepared for the treatment of bacterial and protozoal infections (no data). Compds. I are antibacterial and antiprotozoal agents that may be used to treat various bacterial and protozoal infections and disorders related to such infections (no data). Thus, I (R = R1 = OH, R2 = Me, R3 = R4) was prepared from hygromycin and the use of Streptomyces hygroscopicus via Wittig reaction.

IT **377070-26-3P 377070-37-6P 377070-58-1P 377071-58-4P**
RL: BPN (Biosynthetic preparation); BSU (Biological study, unclassified); IMF (Industrial manufacture); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(preparation of hygromycin A derivs. via Wittig reaction for the treatment of bacterial and protozoal infections)

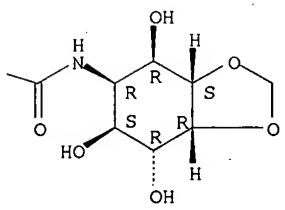
RN 377070-26-3 CAPLUS
CN D-neo-Inositol, 5-[[(2E)-3-[4-[[(5E)-7-O-[2-chloro-4-[[(2-hydroxyethyl)methylamino]methyl]phenyl]-5,6-dideoxy-β-D-arabino-hept-5-enofuranosyl]oxy]-3-hydroxyphenyl]-2-methyl-1-oxo-2-propenyl]amino]-5-deoxy-1,2-O-methylene- (9CI) (CA INDEX NAME)

Absolute stereochemistry.
Double bond geometry as shown.

PAGE 1-A



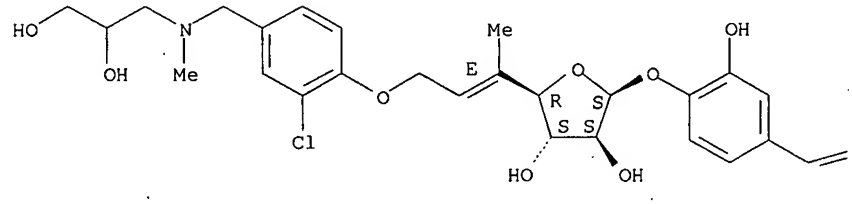
PAGE 1-B



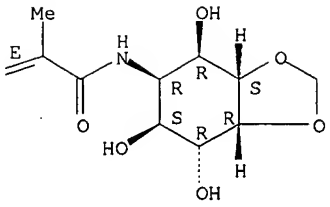
RN 377070-37-6 CAPLUS
CN D-neo-Inositol, 5-[[(2E)-3-[4-[[(5E)-7-O-[2-chloro-4-[[(2,3-dihydroxypropyl)methylamino]methyl]phenyl]-5,6-dideoxy-β-D-arabino-hept-5-enofuranosyl]oxy]-3-hydroxyphenyl]-2-methyl-1-oxo-2-propenyl]amino]-5-deoxy-1,2-O-methylene- (9CI) (CA INDEX NAME)

Absolute stereochemistry.
Double bond geometry as shown.

PAGE 1-A



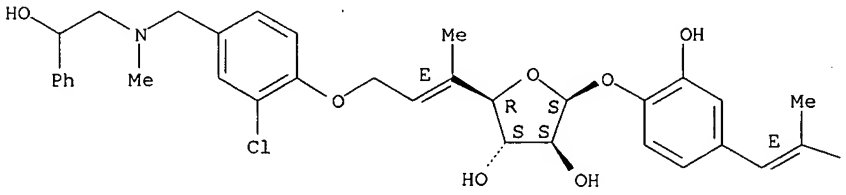
PAGE 1-B



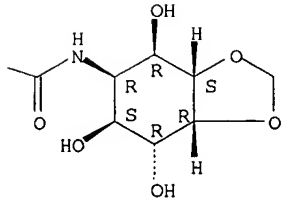
RN 377070-58-1 CAPLUS
CN D-neo-Inositol, 5-[[(2E)-3-[4-[[(5E)-7-O-[2-chloro-4-[[(2-hydroxy-2-phenylethyl)methylamino]methyl]phenyl]-5,6-dideoxy-5-methyl-β-D-arabino-hept-5-enofuranosyl]oxy]-3-hydroxyphenyl]-2-methyl-1-oxo-2-propenyl]amino]-5-deoxy-1,2-methylene- (9CI) (CA INDEX NAME)

Absolute stereochemistry.
Double bond geometry as shown.

PAGE 1-A



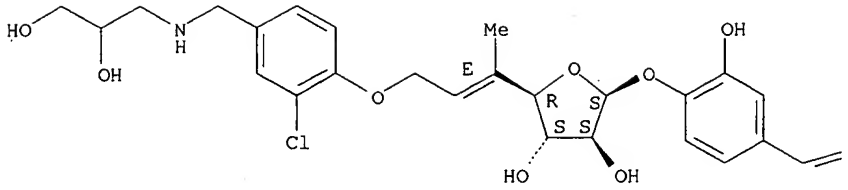
PAGE 1-B



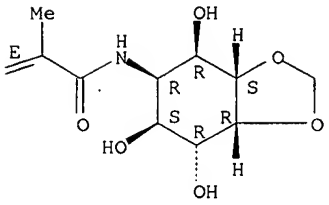
RN 377071-58-4 CAPLUS
CN D-neo-Inositol, 5-[[(2E)-3-[4-[[(5E)-7-O-[2-chloro-4-[[(2,3-dihydroxypropyl)amino]methyl]phenyl]-5,6-dideoxy-5-methyl-β-D-arabino-hept-5-enofuranosyl]oxy]-3-hydroxyphenyl]-2-methyl-1-oxo-2-propenyl]amino]-5-deoxy-1,2-O-methylene- (9CI) (CA INDEX NAME)

Absolute stereochemistry.
Double bond geometry as shown.

PAGE 1-A



PAGE 1-B



REFERENCE COUNT: 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L24 ANSWER 21 OF 68 CAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 2001:780925 CAPLUS <<LOGINID::20061031>>
DOCUMENT NUMBER: 135:335169
TITLE: Pharmaceutical **dopamine glycoconjugate** compositions and methods of their preparation
INVENTOR(S): Christian, Samuel T.
PATENT ASSIGNEE(S): International Medical Innovations, Inc., USA
SOURCE: PCT Int. Appl., 69 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 4
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2001079244	A1	20011025	WO 2001-US11914	20010412
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
US 6548484	B1	20030415	US 2000-547506	20000412
CA 2443774	AA	20011025	CA 2001-2443774	20010412
AU 2001051565	A5	20011030	AU 2001-51565	20010412
EP 1385857	A1	20040204	EP 2001-924960	20010412
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR				
JP 2004523464	T2	20040805	JP 2001-576842	20010412
PRIORITY APPLN. INFO.:			US 2000-547506 A	20000412
			WO 2001-US11914 W	20010412

OTHER SOURCE(S): MARPAT 135:335169
AB Hydrophilic transportable N-linked **glycosyl dopaminergic** prodrug compds. (I), wherein, ring 1 comprises a cyclic or heterocyclic ring, or aryl or heteroaryl ring, all of said rings comprising 4 to 8

carbon atoms, among which atoms are counted "X" and "Y"; R0, R1, R2, R3 and R4 comprise substituents of Ring ; either of X of Y is optional; each of X and Y, when present comprise a carbon atom, a halogen atom or a lower alkyl; Z, R5 and R5' are optional; when Z is present it comprises a lower alkyl having substituents R5, R5'; R6 and R6' comprise substituents on a carbon atom linking Z with N through a single bond, or when Z is absent, linking N with Ring ; N comprises a nitrogen atom of an amine or an amide linked with E through a single bond and having R7 as a substituent; and E comprises a saccharide. **Dopamine** glucamine (II) was prepared by the reduction of isopropylidene-protected **dopamine gluconamide** (preparation given). **Dopamine** receptor binding activity of II was studied in vitro using COS-7 cells. A pharmaceutical powder contained II 2.5, sodium citrate 20.0, **sorbitol** 2.0, flavoring agent 0.1 mg, and water for reconstitution 10 mL.

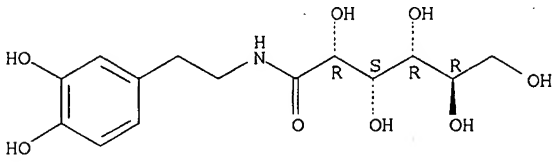
IT **369619-41-0P 369619-47-6P 369619-53-4P 369619-55-6P**

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(pharmaceutical **dopamine glycoconjugate** compns. and methods of their preparation)

RN 369619-41-0 CAPLUS

CN D-Gluconamide, N-[2-(3,4-dihydroxyphenyl)ethyl]- (9CI) (CA INDEX NAME)

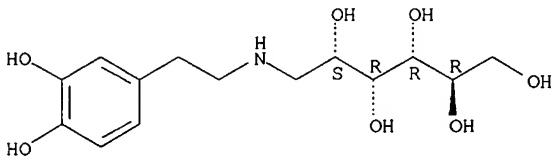
Absolute stereochemistry.



RN 369619-47-6 CAPLUS

CN D-Glucitol, 1-deoxy-1-[[2-(3,4-dihydroxyphenyl)ethyl]amino]- (9CI) (CA INDEX NAME)

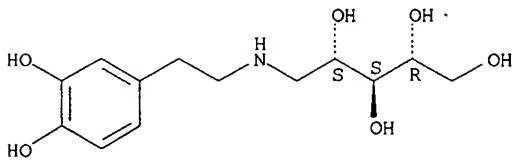
Absolute stereochemistry.



RN 369619-53-4 CAPLUS

CN D-Ribitol, 1-deoxy-1-[[2-(3,4-dihydroxyphenyl)ethyl]amino]-, hydrochloride (9CI) (CA INDEX NAME)

Absolute stereochemistry.

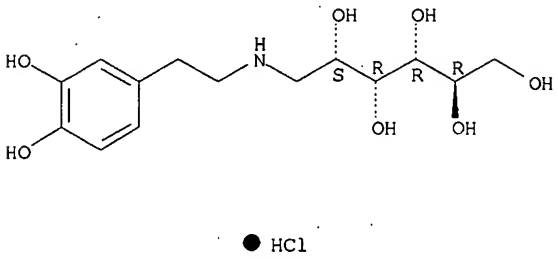


● HCl

RN 369619-55-6 CAPLUS

CN D-Glucitol, 1-deoxy-1-[[2-(3,4-dihydroxyphenyl)ethyl]amino]-, hydrochloride (9CI) (CA INDEX NAME)

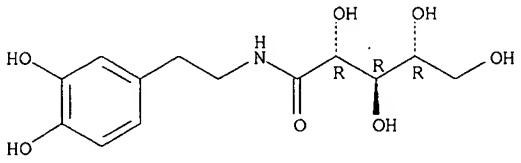
Absolute stereochemistry.



● HCl

IT **369619-49-8P**
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(pharmaceutical **dopamine glycoconjugate** compns. and methods of their preparation)
RN 369619-49-8 CAPLUS
CN D-Ribonamide, N-[2-(3,4-dihydroxyphenyl)ethyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

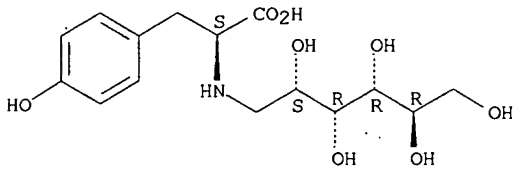


REFERENCE COUNT: 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L24 ANSWER 22 OF 68 CAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 2001:307631 CAPLUS <<LOGINID::20061031>>
DOCUMENT NUMBER: 135:170595
TITLE: Blood-brain barrier transport of L-tyrosine **conjugates**: a model study for the brain targeting using large neutral amino acid transport system
AUTHOR(S): Ohnishi, Toshimasa; Maruyama, Tetsu; Higashi, Sohei; Awazu, Shoji
CORPORATE SOURCE: Department of Biopharmaceutics, School of Pharmacy, Tokyo University of Pharmacy and Life Science, Tokyo, 192-0329, Japan
SOURCE: Journal of Drug Targeting (2000), 8(6), 395-401
CODEN: JDTAEH; ISSN: 1061-186X
PUBLISHER: Harwood Academic Publishers
DOCUMENT TYPE: Journal
LANGUAGE: English
AB We examined the relationship between the charge of the amino or carboxylic function of a substrate and the substrate recognition by the large neutral amino acid (LNAA) transport carrier, using the in situ brain perfusion technique. Glucose-coupled L-tyrosine (GcpY), which has a free carboxylic function, and 2-(L-tyrosylamide)-2-deoxy-D-glucose (Y-2DG), which has a free amino function were synthesized. The inhibitory effect of GcpY on [3H]L-tyrosine uptake was larger than that of N-methyl-L-phenylalamine or N-acetyl-L-phenylalanine, whereas Y-2DG did not affect it. These results indicate that a free amino group is not required for recognition, provided that the modified amino group is able to take a pos. charge. Steric factors appeared to be relatively unimportant.
IT **57170-81-7P**
RL: BPR (Biological process); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study);

PREP (Preparation); PROC (Process); USES (Uses)
(model study for brain targeting using large neutral amino acid transport system)
RN 57170-81-7 CAPLUS
CN L-Tyrosine, N-(1-deoxy-D-glucitol-1-yl)- (9CI) (CA INDEX NAME)

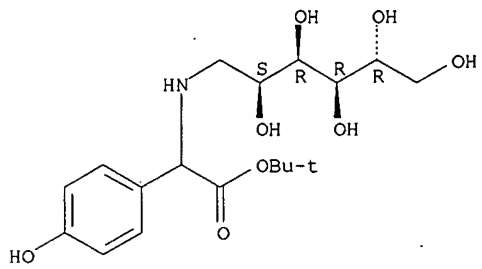
Absolute stereochemistry.



REFERENCE COUNT: 15 THERE ARE 15 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

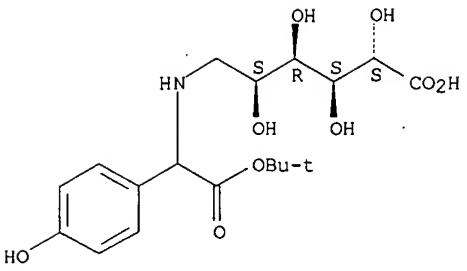
L24 ANSWER 23 OF 68 CAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 2001:70823 CAPLUS <<LOGINID::20061031>>
DOCUMENT NUMBER: 134:237737
TITLE: Systematic analysis of oxidative degradation of polysaccharides using PAGE and HPLC-MS
AUTHOR(S): Ovalle, R.; Soll, C. E.; Lim, F.; Flanagan, C.; Rotunda, T.; Lipke, P. N.
CORPORATE SOURCE: Department of Biology, Center for the Study of Gene Structure and Function, Hunter College of CUNY, New York, NY, 10021, USA
SOURCE: Carbohydrate Research (2001), 330(1), 131-139
CODEN: CRBRAT; ISSN: 0008-6215
PUBLISHER: Elsevier Science Ltd.
DOCUMENT TYPE: Journal
LANGUAGE: English
AB Oxidation of polysaccharides yields hydroxyaldehydes and hydroxycarboxylic acids. Aldehydes and carboxylic acids were sep. **conjugated** to 8-aminonaphthalene-1,3,6-trisulfonic acid (ANTS) or tyrosine t-Bu ester (TBT). The ANTS-labeled derivs. were separated by mol. size on PAGE gels and detected by fluorescence. TBT-labeled derivs. were separated by reverse phase chromatog. on a C18-HPLC column and analyzed by pos. ion electrospray mass spectroscopy (HPLC-MS). This combination of procedures allowed a systematic anal. of carbohydrate oxidation products.
IT **329909-10-6P** **329909-11-7P**
RL: PRP (Properties); SPN (Synthetic preparation); PREP (Preparation)
(mol. structure of oxidative degradation of polysaccharides using page and HPLC-MS)
RN 329909-10-6 CAPLUS
CN D-Glucitol, 1-deoxy-1-[[2-(1,1-dimethylethoxy)-1-(4-hydroxyphenyl)-2-oxoethyl]amino]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



RN 329909-11-7 CAPLUS
CN L-Gulonic acid, 6-deoxy-6-[[2-(1,1-dimethylethoxy)-1-(4-hydroxyphenyl)-2-oxoethyl]amino]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



REFERENCE COUNT: 19 THERE ARE 19 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L24 ANSWER 24 OF 68 CAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 2000:457018 CAPLUS <<LOGINID::20061031>>
DOCUMENT NUMBER: 133:89793
TITLE: Preparation of 4-(4-hydroxyphenoxy)phenylacetyl amino acids and related compounds as novel thyroid receptor ligands
INVENTOR(S): Hangeland, Jon; Zhang, Minsheng; Caringal, Yolanda; Ryono, Denis; Li, Yi-lin; Malm, Johan; Liu, Ye; Garg, Neeraj; Litten, Chris; Garcia Collazo, Ana Maria; Koehler, Konrad
PATENT ASSIGNEE(S): Karo Bio AB, Swed.; et al.
SOURCE: PCT Int. Appl., 60 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2000039077	A2	20000706	WO 1999-IB2084	19991223
WO 2000039077	A3	20000921		
W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW				
RW: GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
CA 2356319	AA	20000706	CA 1999-2356319	19991223
BR 9916851	A	20011016	BR 1999-16851	19991223
EP 1144370	A2	20011017	EP 1999-962486	19991223
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI				
TR 200101834	T2	20011221	TR 2001-200101834	19991223
JP 2002533432	T2	20021008	JP 2000-590990	19991223
AU 758202	B2	20030320	AU 2000-18855	19991223
NZ 512422	A	20040227	NZ 1999-512422	19991223
NO 2001002931	A	20010821	NO 2001-2931	20010613
ZA 2001004932	A	20030115	ZA 2001-4932	20010615
US 6989402	B1	20060124	US 2001-868889	20010914
US 2005282872	A1	20051222	US 2005-189654	20050726

PRIORITY APPLN. INFO.:			
	GB 1998-28442	A	19981224
	WO 1999-IB2084	W	19991223
	US 2001-868889	A3	20010914

OTHER SOURCE(S): MARPAT 133:89793

AB Title compds. I [R1 = halo, trifluoromethyl, alkyl, cycloalkyl; R2, R3 = H, halo, alkyl, at least one of R2 and R3 being other than H; n = 0-4; R4 is an (un)substituted heteroarom. moiety linked to (CH2)n via a nitrogen or carbon atom; an amine, including those in which the amine is derived from an alpha amino acid of either L- or D-stereochem., an **acylsulfonamide**, or a carboxylic acid amide, with the proviso that when n = 0, then R4 can only be a carboxylic acid amide or an **acylsulfonamide**; R5 is H or an acyl or other group capable of

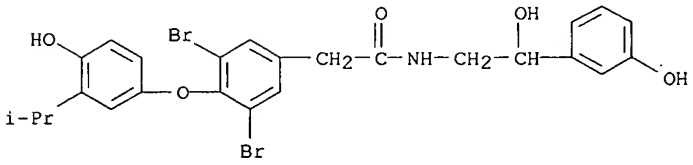
bioconversion to generate the free phenol structure] were prepared for use in the treatment of diseases associated with metabolism dysfunction or which are dependent on the expression of a T3 regulated gene (such as obesity, hypercholesterolemia, atherosclerosis, depression, osteoporosis, hypothyroidism, goiter, thyroid cancer, glaucoma, cardiac arrhythmia, and congestive heart failure). Thus, coupling of 3,5-dibromo-4-(4-hydroxy-3-isopropylphenoxy)phenylacetic acid with D-methionine Me ester hydrochloride followed by hydrolysis afforded N-[3,5-dibromo-4-(4-hydroxy-3-isopropylphenoxy)phenylacetyl]-D-methionine.

IT **280778-77-0P**

RL: SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(preparation of (hydroxyphenoxy)phenylacetyl amino acids and related compds. as novel thyroid receptor ligands)

RN 280778-77-0 CAPLUS

CN Benzeneacetamide, 3,5-dibromo-N-[2-hydroxy-2-(3-hydroxyphenyl)ethyl]-4-[4-hydroxy-3-(1-methylethyl)phenoxy]-, hydrochloride (9CI) (CA INDEX NAME)



● HCl

L24 ANSWER 25 OF 68 CAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 2000:388555 CAPLUS <<LOGINID::20061031>>
DOCUMENT NUMBER: 133:17747
TITLE: Preparation of 6-O-substituted erythromycins as antibacterial agents
INVENTOR(S): Or, Yat Sun; Clark, Richard F.; Ma, Zhenkun; Griesgraber, George; Li, Leping; Chu, Daniel T.
PATENT ASSIGNEE(S): Abbott Laboratories, USA
SOURCE: U.S., 128 pp., Cont.-in-part of U.S. Ser. No. 646,477, abandoned.
CODEN: USXXAM
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 3
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 6075011	A	20000613	US 1997-841038	19970429
CA 2253330	AA	19971113	CA 1997-2253330	19970506
CA 2253330	C	20060725		
WO 9742206	A1	19971113	WO 1997-US7702	19970506
W: AU, BR, CA, CN, CZ, HU, IL, JP, KR, MX, NZ				
RW: AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
AU 9729987	A1	19971126	AU 1997-29987	19970506
AU 726075	B2	20001026		
ZA 9703894	A	19980223	ZA 1997-3894	19970506
CN 1224427	A	19990728	CN 1997-196134	19970506
BR 9708929	A	19990803	BR 1997-8929	19970506
EP 1007530	A1	20000614	EP 1997-924605	19970506
EP 1007530	B1	20051116		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, PT, IE, FI				
NZ 332320	A	20000728	NZ 1997-332320	19970506
AT 310010	E	20051215	AT 1997-924605	19970506
ES 2252784	T3	20060516	ES 1997-924605	19970506
KR 2000010800	A	20000225	KR 1998-708934	19981106
PRIORITY APPLN. INFO.:			US 1996-646477 B2	19960507
			US 1997-841038 A	19970429
			WO 1997-US7702 W	19970506

OTHER SOURCE(S): MARPAT 133:17747

AB Macrolide erythromycins I (R = Me substituted with CN, F, carboxylate, sulfonate, amide, aryl, heteroaryl, substituted alkyl, alkenyl, alkynyl ;X = O, NOH, substituted oxime; R1 = H, OH; R2 = H, OH, halogen, amine, cycloalkyl, alkyl, aryl , OCONH-aryl, OCONH-heteroaryl; R3R4 = O, NOH, substituted oxime; R5 = OMe, F, OH; R6 = H, hydroxy protecting group) were prepared as antibacterial agents. Thus, I (R = allyl, R1 = R4 = OH, R2 = R3 = R6 = H, R5 = Me, X = O) was prepared and tested in vitro for its antibacterial activity (MIC = 0.01 to >100).

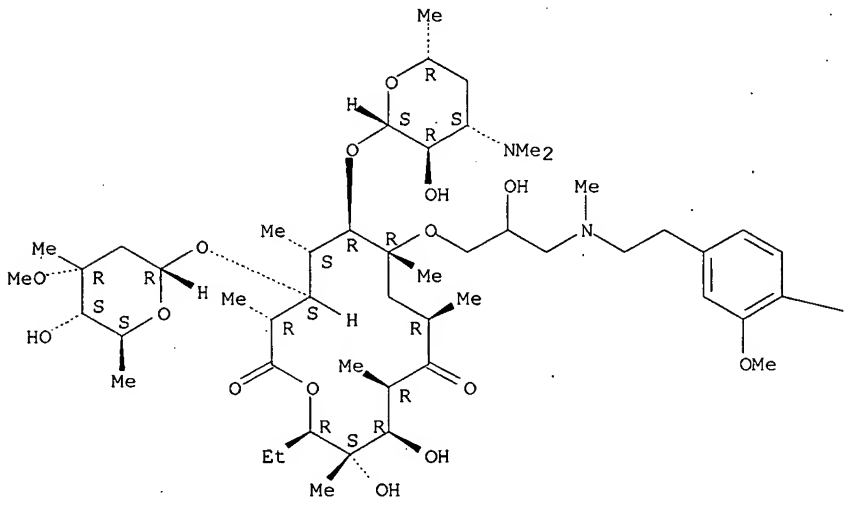
IT **198555-97-4P 271782-82-2P**
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(preparation of 6-O-substituted erythromycins as antibacterial agents)

RN 198555-97-4 CAPLUS

CN Erythromycin, 6-O-[3-[[2-(3,4-dimethoxyphenyl)ethyl]methylamino]-2-hydroxypropyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A



PAGE 1-B

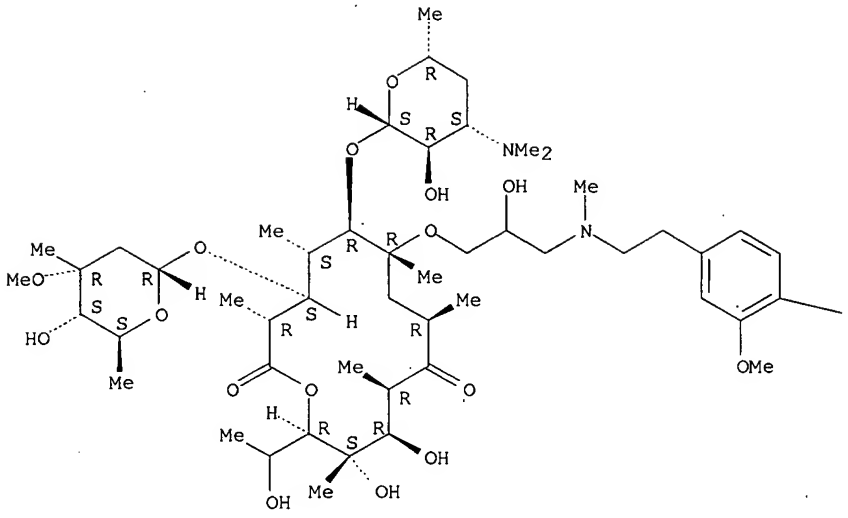
—OMe

RN 271782-82-2 CAPLUS

CN Erythromycin, 6-O-[3-[[2-(3,4-dimethoxyphenyl)ethyl]methylamino]-2-hydroxypropyl]-14-hydroxy- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A



PAGE 1-B

OMe

REFERENCE COUNT: 11 THERE ARE 11 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

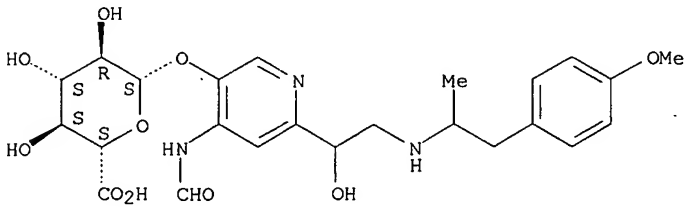
L24 ANSWER 26 OF 68 CAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 1999:819706 CAPLUS <<LOGINID::20061031>>
DOCUMENT NUMBER: 132:136483
TITLE: Enzymatic synthesis of β-D-glucuronides in an enzyme membrane reactor
AUTHOR(S): Pfaar, Ulrike; Gygax, Daniel; Gertsch, Werner; Winkler, Tammo; Ghisalba, Oreste
CORPORATE SOURCE: Novartis Pharma A.-G., Basel, CH-4002, Switz.
SOURCE: Chimia (1999), 53(12), 590-593
CODEN: CHIMAD; ISSN: 0009-4293
PUBLISHER: Neue Schweizerische Chemische Gesellschaft
DOCUMENT TYPE: Journal
LANGUAGE: English
AB The production of 2 O-glucuronides in an enzyme membrane reactor on a 100 to 200 mg scale was examined The aglycons were **conjugated** with the co-substrate β-D-uridine diphosphoglucuronic acid (UDPGA) in the presence of a guinea-pig liver preparation The continuous synthesis, which was run in an enzyme membrane reactor, was followed depending on the substrate up to 118 h or 24 h, resp. The reaction was monitored by TLC or HPLC. The purification of the 2 glucuronides was carried out by ion-exchange chromatog. and by reversed-phase HPLC.
IT **256953-76-1P**
RL: BMF (Bioindustrial manufacture); BIOL (Biological study); PREP

(Preparation)
(enzymic synthesis of β-D-glucuronides in an enzyme membrane reactor)

RN 256953-76-1 CAPLUS

CN β-D-Glucopyranosiduronic acid, 4-(formylamino)-6-[1-hydroxy-2-[[2-(4-methoxyphenyl)-1-methylethyl]amino]ethyl]-3-pyridinyl (9CI) (CA INDEX NAME)

Absolute stereochemistry.



REFERENCE COUNT: 67 THERE ARE 67 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

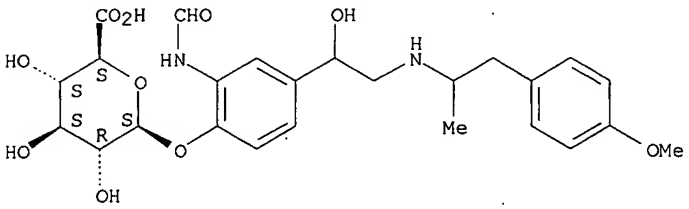
L24 ANSWER 27 OF 68 CAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 1999:632678 CAPLUS <<LOGINID::20061031>>
DOCUMENT NUMBER: 131:346099
TITLE: Mass balance and metabolism of [3H]formoterol in healthy men after combined I.V. and oral administration-mimicking inhalation
AUTHOR(S): Rosenborg, Johan; Larsson, Per; Tegner, Kerstin; Hallstrom, Gosta
CORPORATE SOURCE: Experimental Medicine, AstraZeneca R and D, Lund, S-221 87, Swed.
SOURCE: Drug Metabolism and Disposition (1999), 27(10), 1104-1116
CODEN: DMDSAI; ISSN: 0090-9556
PUBLISHER: American Society for Pharmacology and Experimental Therapeutics
DOCUMENT TYPE: Journal
LANGUAGE: English

AB Mass balance and metabolism of formoterol were investigated in six healthy men in an open study. Mean age was 49.7 yr (range: 40-63). Simultaneous oral (mean dose 88.6 nmol, 49.3 MBq) and i.v. (mean dose 38.2 nmol, 21.4 MBq) doses of tritium-labeled formoterol were administered. The combination of these two administrations was aimed at simulating the fate of inhaled formoterol. Total radioactivity was monitored for 24 h in blood plasma and for at least 4 days in urine and feces. Formoterol and **metabolites** were determined using liquid chromatog. plus radiodetection, directly after centrifugation in urine and after sample workup in blood plasma and feces. **Metabolites** were identified in urine, sampled from two subjects, using liquid chromatog.-electrospray ionization mass spectrometry. Mean total recovery was 86% of the administered formoterol dose, 62% in urine and 24% in feces. Tritiated water was generated and because its in vivo turnover is slow, the terminal decline of total radioactivity was slow and dose recovery was incomplete during the sampling period. Formoterol was **conjugated** to inactive glucuronides and a previously unidentified sulfate. The phenol glucuronide of formoterol was the main **metabolite** in urine. Formoterol was also O-demethylated and deformylated. Plasma exposure to these pharmacol. active **metabolites** was low. O-demethylated formoterol was seen mainly as inactive glucuronide **conjugates** and deformylated formoterol only as an inactive sulfate **conjugate**. Intact formoterol and O-demethylated formoterol dominated recovery in feces. Mean recovery of unidentified **metabolites** was 7.0% in urine and 2.0% in feces.

IT **87833-62-3**
RL: BPR (Biological process); BSU (Biological study, unclassified); MFM (Metabolic formation); BIOL (Biological study); FORM (Formation, nonpreparative); PROC (Process)
(mass balance and metabolism of formoterol in healthy men after combined i.v. and oral administration-mimicking inhalation)

RN 87833-62-3 CAPLUS
CN β-D-Glucopyranosiduronic acid, 2-(formylamino)-4-[1-hydroxy-2-[[2-(4-methoxyphenyl)-1-methylethyl]amino]ethyl]phenyl (9CI) (CA INDEX NAME)

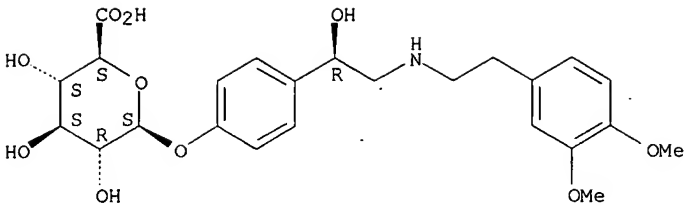
Absolute stereochemistry.



REFERENCE COUNT: 21 THERE ARE 21 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

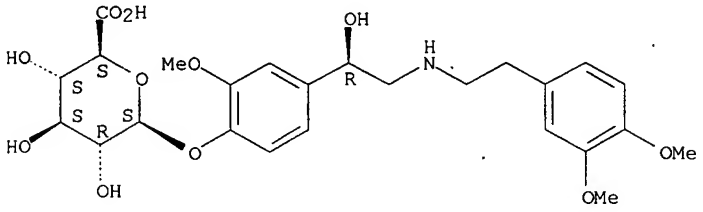
L24 ANSWER 28 OF 68 CAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 1998:800782 CAPLUS <<LOGINID::20061031>>
DOCUMENT NUMBER: 130:162691
TITLE: Usefulness of the hydrogen-deuterium exchange method in the study of drug metabolism using liquid chromatography-tandem mass spectrometry
AUTHOR(S): Ohashi, Noriko; Furuuchi, Satoshi; Yoshikawa, Masayoshi
CORPORATE SOURCE: Pharmaceutical Development Research Laboratory, Tanabe Seiyaku Company Limited, Saitama, 335, Japan
SOURCE: Journal of Pharmaceutical and Biomedical Analysis (1998), 18(3), 325-334
CODEN: JPBADA; ISSN: 0731-7085
PUBLISHER: Elsevier Science B.V.
DOCUMENT TYPE: Journal
LANGUAGE: English
AB The usefulness of the hydrogen-deuterium (H-D) exchange method in the study of drug metabolism was investigated. **Metabolite** samples of denopamine and promethazine prepared in vitro were introduced to a triple stage quadrupole tandem mass spectrometer via a high performance liquid chromatog. (HPLC) system using a deuterated mobile phase. Mass spectra by various ionization modes and collisionally induced dissociation (CID) mass spectra were obtained. A **metabolite** of denopamine was observed to have a shift of 7 mass units by the H-D exchange method, and this shift proved to be a glucuronidated **metabolite.** Discrimination between N- or S-oxide formation and hydroxylation observed in the metabolism of promethazine was also easily accomplished by this method. In this manner, the structures of the **metabolites** were elucidated unequivocally by determining the number of labile hydrogen atoms by the use of the H-D exchange method, since various reactions in drug metabolism are accompanied by an increase or a decrease in the number of labile hydrogen atoms. Addnl. information on the structures was obtained by anal. of the CID spectra of the mol. ion species. Thus, the combination of the H-D exchange method and tandem mass spectrometry was found to be very useful for the study of drug metabolism
IT **96740-69-1** **99270-75-4**
RL: ANT (Analyte); PRP (Properties); ANST (Analytical study)
(hydrogen-deuterium exchange method in the study of drug metabolism using liquid chromatog.-tandem mass spectrometry)
RN 96740-69-1 CAPLUS
CN β-D-Glucopyranosiduronic acid, 4-[(1R)-2-[[2-(3,4-dimethoxyphenyl)ethyl]amino]-1-hydroxyethyl]phenyl (9CI) (CA INDEX NAME)

Absolute stereochemistry.



RN 99270-75-4 CAPLUS
CN β-D-Glucopyranosiduronic acid, 4-[(1R)-2-[[2-(3,4-dimethoxyphenyl)ethyl]amino]-1-hydroxyethyl]-2-methoxyphenyl (9CI) (CA INDEX NAME)

Absolute stereochemistry.



REFERENCE COUNT: 14 THERE ARE 14 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L24 ANSWER 29 OF 68 CAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 1998:471470 CAPLUS <<LOGINID::20061031>>
DOCUMENT NUMBER: 129:108907
TITLE: Preparation of N-[3-(2-aralkylamino-1-hydroxyethyl)phenyl]methanesulfonamides and analogs as β3 adrenoceptor agonists
INVENTOR(S): Washburn, William N.; Girotra, Ravindar N.; Sher, Philip M.; Mikkilineni, Amarendra B.; Poss, Kathleen M.; Mathur, Arvind; Bisacchi, Gregory S.; Gavai, Ashvinikumar V.
PATENT ASSIGNEE(S): Bristol-Myers Squibb Co., USA
SOURCE: U.S., 79 pp., Cont.-in-part of U. S. Ser. No. 171,285, abandoned.
CODEN: USXXAM
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 2
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 5776983	A	19980707	US 1994-346543	19941202
TW 424082	B	20010301	TW 1994-83111890	19941219
HU 72302	A2	19960429	HU 1994-3694	19941220
HU 220063	B	20011028		
CA 2138675	AA	19950622	CA 1994-2138675	19941221
FI 9406003	A	19950622	FI 1994-6003	19941221
NO 9404969	A	19950622	NO 1994-4969	19941221
AU 9481635	A1	19950629	AU 1994-81635	19941221
AU 688417	B2	19980312		
JP 07206806	A2	19950808	JP 1994-336251	19941221
CN 1109050	A	19950927	CN 1994-113297	19941221
ZA 9410213	A	19960621	ZA 1994-10213	19941221
AT 235463	E	20030415	AT 1994-120281	19941221
ES 2194857	T3	20031201	ES 1994-120281	19941221

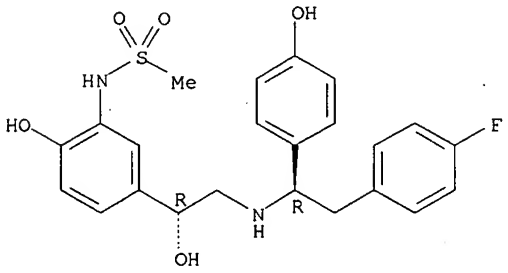
PRIORITY APPLN. INFO.: US 1993-171285 B2 19931221
OTHER SOURCE(S): MARPAT 129:108907
AB R1SO2NHZ1CH(OH)CHR6NHCR3R4Z2R2 [R1 = alkyl or aryl(alkyl); R2 = (un)substituted Ph; R3 = H, alkyl, heterocyclyl, etc.; R4 = H, alkyl,

etc.; R6 = H or alkyl; Z1 = (un)substituted 1,3-phenylene; Z2 = bond, (acyl)methylene, (CH2)2-3] were prepared as β3 adrenoceptor agonists (no data). Thus, 3,4-(MeO)2C6H3CH(NH2)CH2Ph was N-alkylated by 4,3-(PhCH2O)(MeSO2NH)C6H3COCH2Br (preparation each given) to give, after hydrogenation, title compound I.

IT **170686-03-0P 170686-04-1P 170687-11-3P 170687-12-4P 209915-12-8P**
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(preparation of N-[3-(2-aralkylamino-1-hydroxyethyl)phenyl]methanesulfonamides and analogs as β3 adrenoceptor agonists)

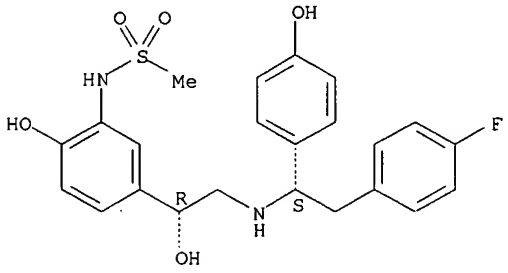
RN 170686-03-0 CAPLUS
CN Methanesulfonamide, N-[5-[(1R)-2-[[(1R)-2-(4-fluorophenyl)-1-(4-hydroxyphenyl)ethyl]amino]-1-hydroxyethyl]-2-hydroxyphenyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



RN 170686-04-1 CAPLUS
CN Methanesulfonamide, N-[5-[(1R)-2-[[(1S)-2-(4-fluorophenyl)-1-(4-hydroxyphenyl)ethyl]amino]-1-hydroxyethyl]-2-hydroxyphenyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

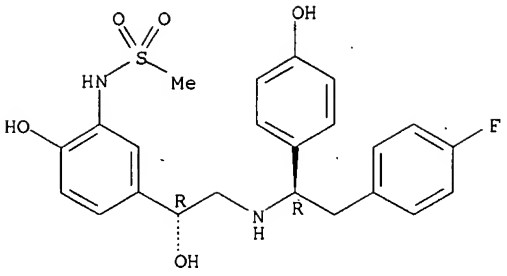


RN 170687-11-3 CAPLUS
CN Methanesulfonamide, N-[5-[(1R)-2-[[(1R)-2-(4-fluorophenyl)-1-(4-hydroxyphenyl)ethyl]amino]-1-hydroxyethyl]-2-hydroxyphenyl]-, trifluoroacetate (salt) (9CI) (CA INDEX NAME)

CM 1

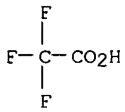
CRN 170686-03-0
CMF C23 H25 F N2 O5 S

Absolute stereochemistry.



CM 2

CRN 76-05-1
CMF C2 H F3 O2

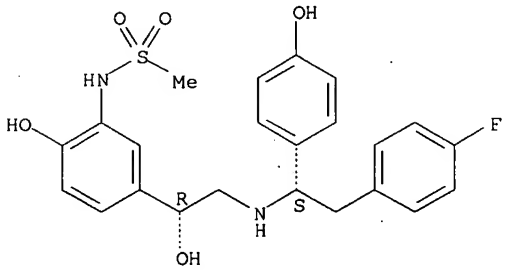


RN 170687-12-4 CAPLUS
CN Methanesulfonamide, N-[5-[(1R)-2-[[(1S)-2-(4-fluorophenyl)-1-(4-hydroxyphenyl)ethyl]amino]-1-hydroxyethyl]-2-hydroxyphenyl]-, trifluoroacetate (salt) (9CI) (CA INDEX NAME)

CM 1

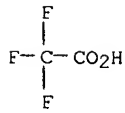
CRN 170686-04-1
CMF C23 H25 F N2 O5 S

Absolute stereochemistry.



CM 2

CRN 76-05-1
CMF C2 H F3 O2



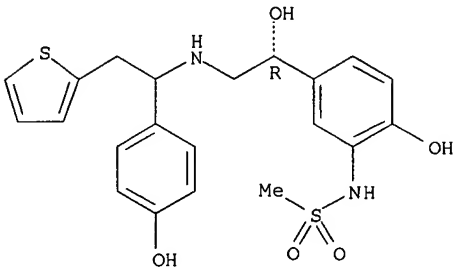
RN 209915-12-8 CAPLUS

CN Methanesulfonamide, N-[2-hydroxy-5-[(1R)-1-hydroxy-2-[[1-(4-hydroxyphenyl)-2-(2-thienyl)ethyl]amino]ethyl]phenyl]-, mono(trifluoroacetate) (salt) (9CI) (CA INDEX NAME)

CM 1

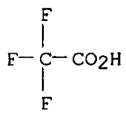
CRN 209915-11-7
CMF C21 H24 N2 O5 S2

Absolute stereochemistry.



CM 2

CRN 76-05-1
CMF C2 H F3 O2



REFERENCE COUNT: 34 THERE ARE 34 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L24 ANSWER 30 OF 68 CAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 1998:400642 CAPLUS <<LOGINID::20061031>>
DOCUMENT NUMBER: 129:156396
TITLE: Enzyme-linked immunosorbent assay for TA-2005-glucuronide in human plasma
AUTHOR(S): Matsukawa, Masami; Takeda, Kyoko; Shima, Hideaki; Tagawa, Kouzou; Banno, Kiyoshi; Sato, Tadashi
CORPORATE SOURCE: Analytical Research Laboratory, Tanabe Seiyaku Co., Ltd., Osaka, 532, Japan
SOURCE: Journal of Pharmaceutical and Biomedical Analysis (1998), 17(2), 245-254
CODEN: JPBADA; ISSN: 0731-7085
PUBLISHER: Elsevier Science B.V.
DOCUMENT TYPE: Journal
LANGUAGE: English

AB A sensitive ELISA for the determination of TA-2005 glucuronide, the main **metabolite** of the β-adrenergic receptor agonist TA-2005, without prior deconjugation was developed. Coupling the hapten with bovine serum albumin (BSA) or β-D-galactosidase was carried out by the N-hydroxysuccinimide ester method. An anti-TA-2005-glucuronide antiserum was obtained from guinea pigs immunized with the hapten-BSA **conjugate**. The ELISA was based on a competitive assay in which the separation of bound from free fraction was performed by the double antibody technique using rabbit anti-guinea pig Ig antibody adsorbed to microtiter plates. A satisfactory standard curve for TA-2005 glucuronide was obtained in the range of 30 pg to 3 ng/mL using 25 μL of human blood plasma. Inter-day and intra-assay variations were 7.0-17.5 and 1.0-11.7%, resp. The recoveries of TA-2005 glucuronide from spiked plasma samples were 95.5-120% (inter-assay) and 96.0-123.3% (intra-assay). The

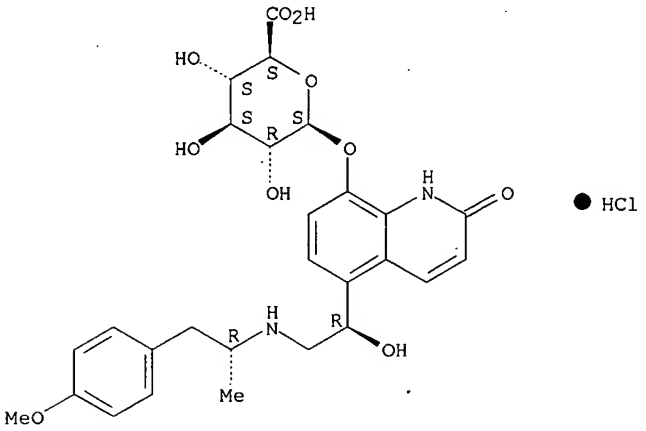
cross-reactivities of the prepared antiserum with compds. related to TA-2005 glucuronide were quite low, although there was a considerable cross-reactivity with TA-2005. TA-2005 glucuronide could be easily separated from TA-2005 by simple pretreatment of plasma samples with a C18 solid-phase extraction cartridge column. The method was applied to the determination of TA-2005 glucuronide in human blood plasma samples for the evaluation of TA-2005 pharmacokinetics. The ELISA is suitable for pharmacokinetic studies of TA-2005 in humans.

IT **211098-29-2**
RL: ANT (Analyte); ANST (Analytical study)
(TA-2005 glucuronide determination in human blood plasma by ELISA)

RN 211098-29-2 CAPLUS

CN β-D-Glucopyranosiduronic acid, 1,2-dihydro-5-[(1R)-1-hydroxy-2-[[(1R)-2-(4-methoxyphenyl)-1-methylethyl]amino]ethyl]-2-oxo-8-quinolinyl, monohydrochloride (9CI) (CA INDEX NAME)

Absolute stereochemistry.



REFERENCE COUNT: 13 THERE ARE 13 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L24 ANSWER 31 OF 68 CAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 1997:777453 CAPLUS <<LOGINID::20061031>>
DOCUMENT NUMBER: 128:110322
TITLE: Stereoselective sulfate **conjugation** of fenoterol by human phenolsulfotransferases
AUTHOR(S): Wilson, A. A.; Wang, J.; Koch, L. P.; Wall, T.
CORPORATE SOURCE: Department of Cell and Molecular Pharmacology and Experimental Therapeutics, Medical University of South Carolina, Charleston, SC, 29425, USA
SOURCE: Xenobiotica (1997), 27(11), 1147-1154
CODEN: XENOBH; ISSN: 0049-8254
PUBLISHER: Taylor & Francis Ltd.
DOCUMENT TYPE: Journal
LANGUAGE: English

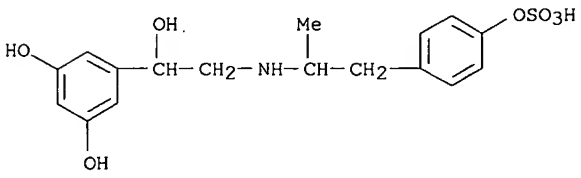
AB The objective of this study was to determine (1) the mol. site(s) of sulfoconjugatlon of fenoterol; (2) the human pherolsulfotransferase (PST) isoform(s) involved; and (3) the stereochem. of the enzymic reaction. Using the human Hep G2 cell line, HPLC isolation and FAB/ms/ms, it was determined that fenoterol is sulfated both in the 4'-hydroxyphenyl position and in one of the 3',5'-dihydroxyphenyl positions. Recombinant human M-PST preferentially sulfated the 4'-hydroxyphenyl position. In contrast, recombinant P-PST exclusively sulfated the 3',5'-hydroxyphenyl position. The M-PST-catalyzed sulphation of the 4'-hydroxyphenyl position was highly selective for the active RR-enantiomer, whereas the sulphation of the 3',5'-dihydroxyphenyl position was slightly selective for the opposite SS-enantiomer. The P-PST-catalyzed sulphation of the 3',5'-hydroxyphenyl position was selective for the inactive SS-enantiomer.

IT **201664-34-8** **201664-36-0**
RL: ANT (Analyte); BSU (Biological study, unclassified); MFM (Metabolic formation); ANST (Analytical study); BIOL (Biological study); FORM (Formation, nonpreparative)

(stereoselective sulfate **conjugation** of fenoterol by human phenolsulfotransferases)

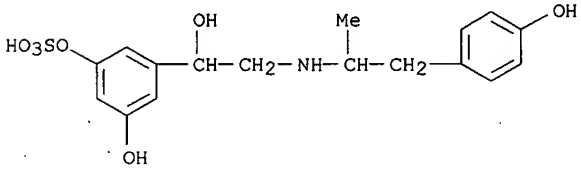
RN 201664-34-8 CAPLUS

CN 1,3-Benzenediol, 5-[1-hydroxy-2-[[1-methyl-2-[4-(sulfooxy)phenyl]ethyl]amino]ethyl]- (9CI) (CA INDEX NAME)



RN 201664-36-0 CAPLUS

CN 1,3-Benzenediol, 5-[1-hydroxy-2-[[2-(4-hydroxyphenyl)-1-methylethyl]amino]ethyl]-, 1-(hydrogen sulfate) (9CI) (CA INDEX NAME)



REFERENCE COUNT: 16 THERE ARE 16 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L24 ANSWER 32 OF 68 CAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 1997:746060 CAPLUS <<LOGINID::20061031>>

DOCUMENT NUMBER: 127:359051

TITLE: Preparation of 6-O-substituted erythromycins as bactericides

INVENTOR(S): Or, Yat Sun; Clark, Richard F.; Ma, Zhenkun; Griesgraber, George; Li, Leping; Chu, Daniel T.

PATENT ASSIGNEE(S): Abbott Laboratories, USA

SOURCE: PCT Int. Appl., 225 pp.
CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 3

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9742206	A1	19971113	WO 1997-US7702	19970506
W: AU, BR, CA, CN, CZ, HU, IL, JP, KR, MX, NZ				
RW: AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
US 6075011	A	20000613	US 1997-841038	19970429
CA 2253330	AA	19971113	CA 1997-2253330	19970506
CA 2253330	C	20060725		
AU 9729987	A1	19971126	AU 1997-29987	19970506
AU 726075	B2	20001026		
BR 9708929	A	19990803	BR 1997-8929	19970506
EP 1007530	A1	20000614	EP 1997-924605	19970506
EP 1007530	B1	20051116		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, PT, IE, FI				
NZ 332320	A	20000728	NZ 1997-332320	19970506
JP 2002515034	T2	20020521	JP 1997-540164	19970506
AT 310010	E	20051215	AT 1997-924605	19970506
PRIORITY APPLN. INFO.:			US 1996-646477 A	19960507
			US 1997-841038 A	19970429
			WO 1997-US7702 W	19970506

OTHER SOURCE(S): MARPAT 127:359051

AB Antimicrobial erythromycins, e.g. I (X = O, NOH, NOR; R = alkyl, aralkyl, cycloalkyl, arylsilyl; R1, R2 = H, OH; R3 = OMe, F, OH; R4, R5 = one is H

and the other is OH, alkyl, aralkyl, sulfone; R4, R5 = X; R6 = H, hydroxy protecting group; R7 = F, alkyl, alkenyl, alkynyl sulfone, amide), were prepared as bactericides. Thus, I (X = O; R1 = R4= OH; R2 = R5 = R6 = H; R3 = OMe, R7 = Pr) was prepared and tested for its in vitro antibacterial activity (MIC = 0.05-100).

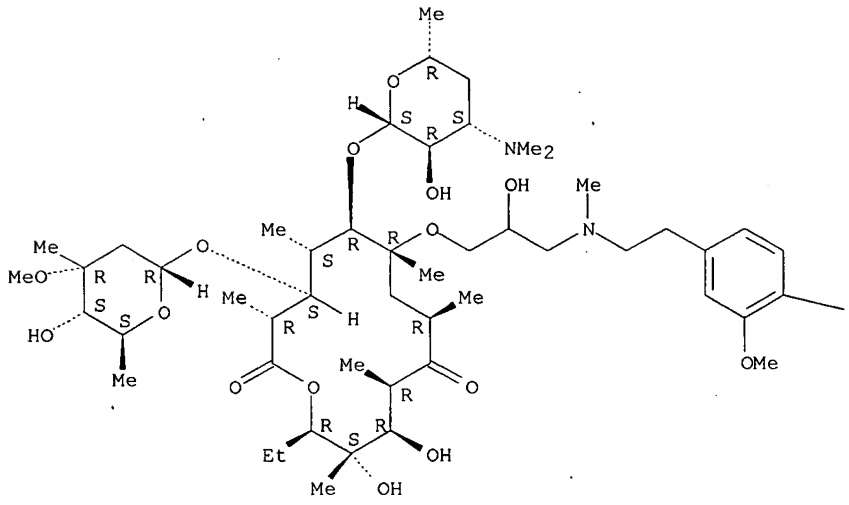
IT **198555-97-4P**
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of 6-O-substituted erythromycins as bactericides)

RN 198555-97-4 CAPLUS

CN Erythromycin, 6-O-[3-[[2-(3,4-dimethoxyphenyl)ethyl]methylamino]-2-hydroxypropyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A



PAGE 1-B

OMe

L24 ANSWER 33 OF 68 CAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 1997:567722 CAPLUS <<LOGINID::20061031>>

DOCUMENT NUMBER: 127:232745

TITLE: Enhanced albumin uptake by rat tumors

AUTHOR(S): Wunder, A.; Stehle, G.; Sinn, H.; Schrenk, H. H.; Hoff-Biederbeck, D.; Bader, F.; Friedrich, E. A.; Peschke, P.; Maier-Borst, W.; Heene, D. L.

CORPORATE SOURCE: First Department of Medicine, Faculty for Clinical Medicine Mannheim, University of Heidelberg, Heidelberg, Germany

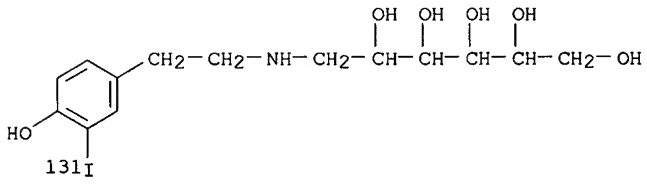
SOURCE: International Journal of Oncology (1997), 11(3),

497-507
CODEN: IJONES; ISSN: 1019-6439
PUBLISHER: International Journal of Oncology
DOCUMENT TYPE: Journal
LANGUAGE: English

AB Limited data is available on albumin accumulation and catabolism by tumors. This is caused by the lack of suitable radiolabels for long-term follow-up of protein catabolism in vivo. Conventional radiolabels like radioiodine are metabolically unstable. After lysosomal protein degradation the diffusible tracer residues are rapidly released from catabolic sites. Thus, tumors with high metabolic activity evade detection. To study the uptake of rat blood serum albumin (RSA) by tumors, a conventional radioiodine label and two residualizing radiolabels were chosen. The residualizing 131I-**tyraminedeoxysorbitol** and 111In-DTPA (diethylenetriaminepentaacetic acid) protein labels remain trapped at catabolic sites after lysosomal degradation of their carrier proteins. We were able to show by scintigraphy and after organ removal that a Walker-256 carcinosarcoma with a tumor size of .apprx.5% body weight accumulated >20% of the injected 111In-DTPA-RSA within 24 h. The tumor uptake rates for albumin exceeded those of the kidneys .apprx.4-times, and those of the liver .apprx.3-times. It was estimated that about one out of 2 albumin mols. trapped by an ovarian-342 tumor must have been degraded during 72 h. The high uptake and degradation rates would make albumin an alternative nitrogen and energy source for these tumors. Although an unfavorable time-frame limits the use of residualizing tracer-labeled albumin for scintigraphic tumor diagnosis in humans, albumin might be an interesting carrier for delivering covalently attached chemotherapeutic agents into tumors by an alternative lysosomal route.

IT **133368-66-8**
RL: ARG (Analytical reagent use); BPR (Biological process); BSU (Biological study, unclassified); ANST (Analytical study); BIOL (Biological study); PROC (Process); USES (Uses)
(albumin complex; enhanced albumin uptake by rat tumors and its tracing by residualizing labels)

RN 133368-66-8 CAPLUS
CN D-Glucitol, 1-deoxy-1-[[2-[4-hydroxy-3-(iodo-131I)phenyl]ethyl]amino]- (9CI) (CA INDEX NAME)



L24 ANSWER 34 OF 68 CAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 1997:414514 CAPLUS <<LOGINID::20061031>>
DOCUMENT NUMBER: 127:156215
TITLE: Biotransformation of the novel inotropic agent toborinone (OPC-18790) in rats and dogs: evidence for the formation of novel glutathione and two cysteine **conjugates**
AUTHOR(S): Kitani, Mami; Miyamoto, Gohachiro; Nagasawa, Masakazu; Yamada, Toshihide; Matsubara, Jun; Uchida, Minoru; Odomi, Masaaki
CORPORATE SOURCE: Tokushima Res. Inst. and Formulation Research Inst., Otsuka Pharmaceutical Co., Ltd., USA
SOURCE: Drug Metabolism and Disposition (1997), 25(6), 663-674
CODEN: DMDSAI; ISSN: 0090-9556
PUBLISHER: Williams & Wilkins
DOCUMENT TYPE: Journal
LANGUAGE: English

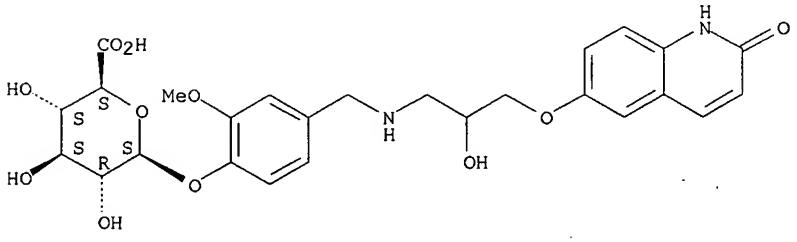
AB The metabolism of toborinone, (±)-6-[3-(3,4-dimethoxybenzylamino)-2-hydroxypropoxy]-2(1H)-quinolinone, a novel inotropic agent, was studied in rats and dogs after i.v. administration. Chemical structures of the 13 **metabolites** were characterized by direct-probe FAB/MS and field desorption/MS, LC/FAB/MS, and various NMR measurements. After i.v. dosing

of 10 mg/kg [14C]toborinone, fecal and urinary recoveries of the 14C dose were .apprx.70% and 25-30%, resp., in both rats and dogs. The predominant component of radioactivity was the unchanged toborinone in every biol. specimen in rats and dogs. Although unchanged toborinone was predominantly observed, toborinone underwent extensive **conjugations** with glucuronic acid, sulfate, and glutathione, either directly or following phase I reaction. **Metabolites** resulting from oxidative N-C cleavage were minor both in number and in quantity in every biol. specimen in rats and dogs. In rats, toborinone underwent O-demethylation to form M-7 and successive phase II reaction to yield the glucuronide M-1 and the sulfoconjugate M-2, and deconjugation to yield M-7, which was a primary **metabolite** accounted for 35.67% of the radioactivity excreted in the feces by 48 h. **Conjugates** M-1 and M-2 were the major **metabolites** in rat plasma. In dogs, toborinone was metabolized via mercapturic acid pathway to yield the primary **metabolites**, cysteine **conjugates** M-10 and M-11 that accounted for 19.10% and 6.70% of the radioactivity excreted in the feces by 48 h and that were detected species specifically in dogs. The glutathione **conjugate** M-13, which was isolated from in vitro incubations using dog liver, led us to consider a possible mercapturic acid pathway from the parent compound to M-10. **Metabolites** in dog plasma and those in urine in both rats and dogs were minor in quantity. The metabolic pathways of toborinone in rats and dogs are proposed herein.

IT **193546-51-9 193546-54-2**
RL: BSU (Biological study, unclassified); MFM (Metabolic formation); BIOL (Biological study); FORM (Formation, nonpreparative)
(toborinone biotransformation in rats and dogs: glutathione and cysteine **conjugates** formation)

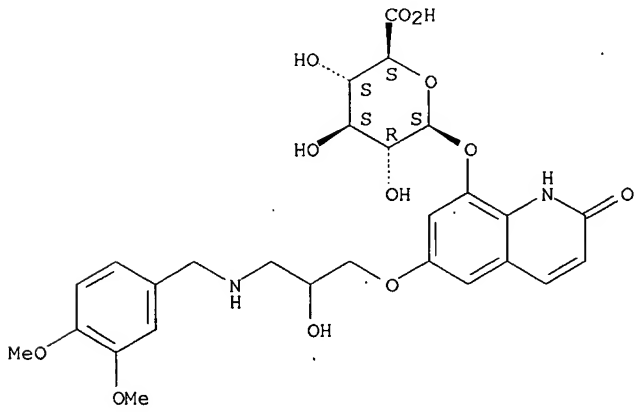
RN 193546-51-9 CAPLUS
CN β-D-Glucopyranosiduronic acid, 4-[[[3-[(1,2-dihydro-2-oxo-6-quinolinyl)oxy]-2-hydroxypropyl]amino]methyl]-2-methoxyphenyl (9CI) (CA INDEX NAME)

Absolute stereochemistry.



RN 193546-54-2 CAPLUS
CN β-D-Glucopyranosiduronic acid, 6-[3-[[(3,4-dimethoxyphenyl)methyl]amino]-2-hydroxypropoxy]-1,2-dihydro-2-oxo-8-quinolinyl (9CI) (CA INDEX NAME)

Absolute stereochemistry.



L24 ANSWER 35 OF 68 CAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 1997:69419 CAPLUS <<LOGINID::20061031>>
DOCUMENT NUMBER: 126:89702
TITLE: Preparation of sulfate esters of aminosugar derivatives for the inhibition of the migration and proliferation of vascular smooth muscle cells.
INVENTOR(S): Chucholowski, Alexander; Pech, Michael; Fingerle, Juergen; Rouge, Marianne; Iberg, Niggi; Schmid, Gerard; Maerki, Hans Peter; Tschopp, Thomas; Mueller, Rita; Wessel, Hans Peter
PATENT ASSIGNEE(S): F. Hoffmann-La Roche Ag, Switz.
SOURCE: Eur. Pat. Appl., 59 pp.
CODEN: EPXXDW
DOCUMENT TYPE: Patent
LANGUAGE: German
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 741128	A2	19961106	EP 1996-106471	19960424
EP 741128	A3	19970326		
EP 741128	B1	20010620		
R: AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LI, LU, NL, PT, SE				
CA 2174583	AA	19961106	CA 1996-2174583	19960419
JP 08301839	A2	19961119	JP 1996-100874	19960423
JP 2881752	B2	19990412		
AT 202339	E	20010715	AT 1996-106471	19960424
ES 2160190	T3	20011101	ES 1996-106471	19960424
PT 741128	T	20011130	PT 1996-106471	19960424
US 5830920	A	19981103	US 1996-639986	19960426
CN 1150589	A	19970528	CN 1996-100231	19960430
BR 9602148	A	20050621	BR 1996-2148	19960503
GR 3036660	T3	20011231	GR 2001-401520	20010918

PRIORITY APPLN. INFO.: CH 1995-1310 A 19950505

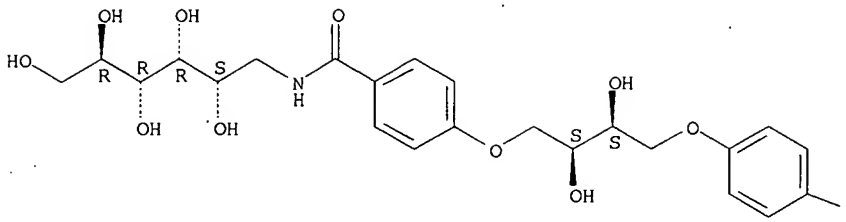
AB (A1X1)m1(Y1X2)n1(Q1X3)m2(Y2X4)n2(Z1X5)m3(Y3X6)n3D(Y6X12)n6(Z2X11)m6(Y5X10)n5(Q2X9)m5(Y4X8)n4(A2X7)m4, (A1X1)m1(Y1X2)n1(Q1X3)m2(Y2X4)n2(Z1X5)m3(Y3X6)n3W[(Y9X18)n9(Z3X17)m9(Y8X16)n8(Q3X15)m8(Y7X14)n7(A3X13)m7][(Y6X12)n6(Z2X11)m6(Y5X10)n5(Q2X9)m5(Y4X8)n4(A2X7)m4] n1-n9, m1-m9 = 0, 1; X1-X18 = O, CONR1, NR1; [R1 = H, alkyl; W = Ph or s-triazine residue; A1-A3 = sugar or sugar acid residue, tris(hydroxymethyl)methyl residue; Y1-Y9 = aromatic ring systems; D = divalent sugar or sugar acid residue; Q1-Q3, Z1-Z3 = D, didesoxyglucopyranoside residue; ≥1 of A1-A3, D, Q1-Q3, Z1-Z3 is sulfated], were prepared Thus, 2,3:4,5-di-O-isopropylidene-1,6-bis-O-(4-methylphenylsulfonyl)**galactitol**, Me (E)-3-(4-hydroxyphenyl)acrylate, and K2CO3 were stirred 18 h at 130° to give 2,3:4,5-di-O-isopropylidene-1,6-bis-O-[(E)-4-(2-methoxycarbonylvinyl)phenyl]**galactitol**, which was converted to 1,6-bis-O-[4-[2-(2,3,4,5,6-penta-O-sulfo-D-glucit-1-ylcarbamoyl)ethyl]phenyl]-2,3,4,5-tetra-O-**sulfogalactitol** tetradecylsodium salt. The latter at 3 mg/kg/h i.v. in rats with damaged left carotids gave 47% inhibition of tissue proliferation.

IT **185513-76-2P** **185513-93-3P**
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation of sulfate esters of aminosugar derivs. for the inhibition of the migration and proliferation of vascular smooth muscle cells)

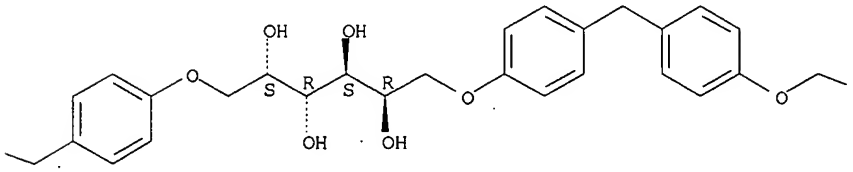
RN 185513-76-2 CAPLUS
CN Galactitol, 1,6-bis-O-[4-[[4-[(2S,3S)-4-[4-[[(1-deoxy-D-glucitol-1-yl)amino]carbonyl]phenoxy]-2,3-dihydroxybutoxy]phenyl]methyl]phenyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

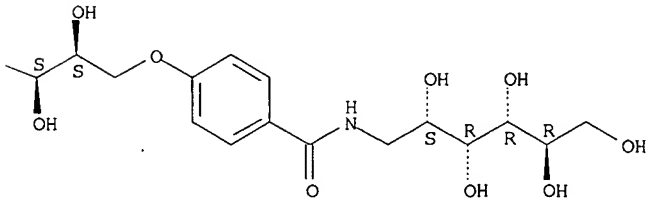
PAGE 1-A



PAGE 1-B



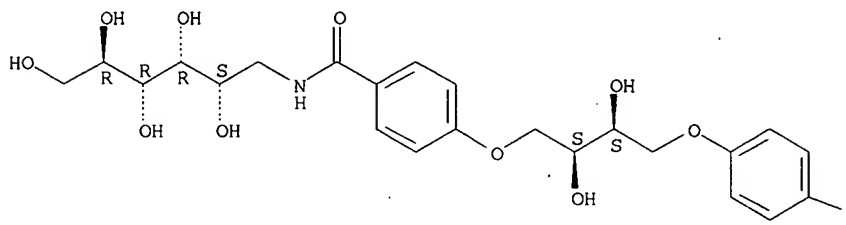
PAGE 1-C



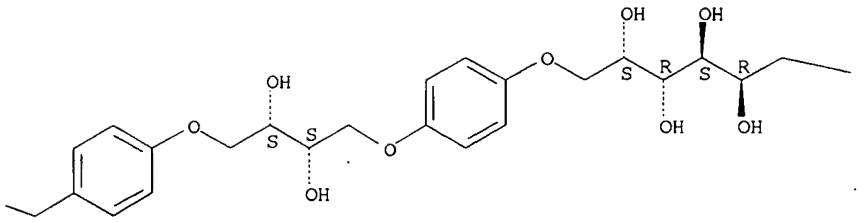
RN 185513-93-3 CAPLUS
CN Galactitol, 1,6-bis-O-[4-[(2S,3S)-4-[4-[[4-[(2S,3S)-4-[4-[[(1-deoxy-D-glucitol-1-yl)amino]carbonyl]phenoxy]-2,3-dihydroxybutoxy]phenyl]methyl]phenoxy]-2,3-dihydroxybutoxy]phenyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

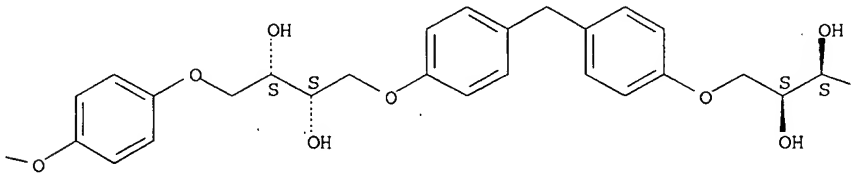
PAGE 1-A



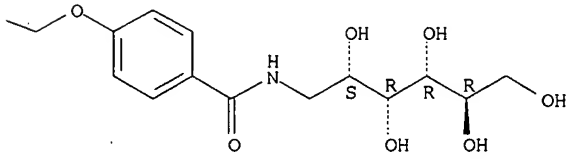
PAGE 1-B



PAGE 1-C



PAGE 1-D



L24 ANSWER 36 OF 68 CAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 1996:301308 CAPLUS <<LOGINID::20061031>>
DOCUMENT NUMBER: 124:325416
TITLE: **Conjugates** for treatment of infections, autoimmune diseases, and skin diseases
INVENTOR(S): Sinn, Hansjoerg; Schrenk, Hans-Hermann; Maier-Borst, Wolfgang; Stehle, Gerd; Wunder, Andreas; Hoff-Biederbeck, Dirk; Heene, Dieter Ludwig
PATENT ASSIGNEE(S): Deutsches Krebsforschungszentrum Stiftung des Oeffentlichen Rechts, Germany
SOURCE: Ger. Offen., 7 pp.
CODEN: GWXXBX
DOCUMENT TYPE: Patent
LANGUAGE: German
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
DE 4435087	A1	19960404	DE 1994-4435087	19940930
WO 9610422	A1	19960411	WO 1995-DE1337	19950926
W: JP, US				
RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				

EP 799054	A1	19971008	EP 1995-933300	19950926
EP 799054	B1	20010131		
R: AT, BE, CH, DE, DK, ES, FR, GB, IT, LI, NL, SE				
JP 10506398	T2	19980623	JP 1995-511275	19950926
AT 198990	E	20010215	AT 1995-933300	19950926
ES 2156215	T3	20010616	ES 1995-933300	19950926
US 5906977	A	19990525	US 1997-817678	19970923
PRIORITY APPLN. INFO.:			DE 1994-4435087	A 19940930
			WO 1995-DE1337	W 19950926

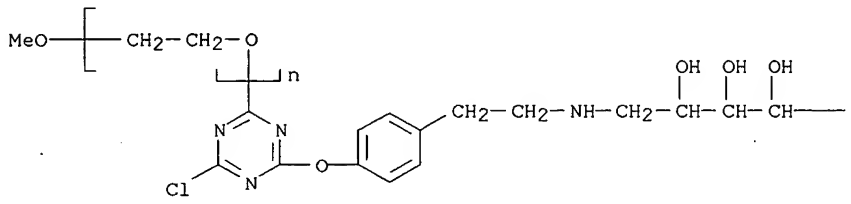
AB Therapeutic or diagnostic agents for the title diseases are **conjugated** via a linker to a carrier to retard their excretion, prolong their half-life in the organism, and cause their enrichment in the affected tissues. Suitable carriers include proteins (e.g. albumin) and PEG. Thus, in rats with Sephadex bead-induced hind leg inflammation, subsequently administered tetra(hydroxyphenyl)porphyrin-cyanuric chloride-PEG Me ether **conjugate** accumulated at the site of inflammation to .apprx.15% after 36-72 h.

IT **176547-34-5**
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(**conjugates** for treatment of infections, autoimmune diseases, and skin diseases)

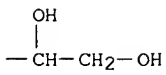
RN 176547-34-5 CAPLUS

CN Poly(oxy-1,2-ethanediyl), α-methyl-ω-hydroxy-, 6-ether with 1-[[2-[4-[(4-chloro-6-hydroxy-1,3,5-triazin-2-yl)oxy]phenyl]ethyl]amino]-1-deoxy-D-glucitol (9CI) (CA INDEX NAME)

PAGE 1-A



PAGE 1-B



L24 ANSWER 37 OF 68 CAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER:	1995:938107 CAPLUS <<LOGINID::20061031>>
DOCUMENT NUMBER:	124:8408
TITLE:	Preparation of **hydroxyaminoethylphenylsulfonamide** catecholamine surrogates useful as β3 adrenergic agonists.
INVENTOR(S):	Washburn, William N.; Girotra, Ravindar N.; Sher, Philip M.; Mikkilineni, Amarendra B.; Poss, Kathleen M.; Mathur, Arvind; Gavai, Ashvinikumar; Bisacchi, Gregory S.
PATENT ASSIGNEE(S):	Bristol-Myers Squibb Co., USA
SOURCE:	Eur. Pat. Appl., 147 pp. CODEN: EPXXDW
DOCUMENT TYPE:	Patent
LANGUAGE:	English
FAMILY ACC. NUM. COUNT:	2
PATENT INFORMATION:	

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 659737	A2	19950628	EP 1994-120281	19941221

EP 659737	A3	19970305			
EP 659737	B1	20030326			
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LI, LU, MC, NL, PT, SE					
TW 424082	B	20010301	TW 1994-83111890		19941219
HU 72302	A2	19960429	HU 1994-3694		19941220
HU 220063	B	20011028			
CA 2138675	AA	19950622	CA 1994-2138675		19941221
FI 9406003	A	19950622	FI 1994-6003		19941221
NO 9404969	A	19950622	NO 1994-4969		19941221
AU 9481635	A1	19950629	AU 1994-81635		19941221
AU 688417	B2	19980312			
JP 07206806	A2	19950808	JP 1994-336251		19941221
CN 1109050	A	19950927	CN 1994-113297		19941221
ZA 9410213	A	19960621	ZA 1994-10213		19941221
AT 235463	E	20030415	AT 1994-120281		19941221
ES 2194857	T3	20031201	ES 1994-120281		19941221
PRIORITY APPLN. INFO.:			US 1993-171285	A	19931221

OTHER SOURCE(S): CASREACT 124:8408; MARPAT 124:8408

AB Title compds. [I; A = bond, (CH2)n, CHB; n = 1-3; B = cyano, CONR9R91, CO2R7; R1 = alkyl, aryl, aralkyl; R2 = H, OH, alkoxy, CH2OH, cyano, CO2R7, CO2H, CONH2, tetrazolyl, CH2NH2, halo; R3 = H, alkyl, heterocyclyl, (substituted) Ph; R4 = H, alkyl, B; R5, R51 = H, alkoxy, alkyl, halo, OH, cyano, (CH2)nNR6COR7, CONR6R61, CONR6OR6, CO2R6, SR7, SOR7, SO2R7, NR6SO2R1, NR6R61, NR6COR7, OCH2CONR6R61, OCH2CO2R7, aryl; R5R51 = atoms to form aryl, heterocyclyl; R6, R61 = H, alkyl; R7 = alkyl; R9, R91 = H, alkyl, cycloalkyl, aralkyl, aryl, heteroaryl; R9R91N = heterocyclyl; with the proviso that when A = bond or (CH2)n and R3 = H or unsubstituted alkyl, then R4 = B or substituted alkyl], were prepared for treating diabetes, obesity, intestinal hypermotility, etc. (no data). Thus, 3,4-dimethoxybenzaldehyde in THF was treated with PhCH2MgCl in THF followed by 20 min reflux to give 90% α-(3,4-dimethoxyphenyl)benzeneethanol; Jones oxidation gave 89% 1-(3,4-dimethoxyphenyl)-2-phenylethanone. The latter was heated at 160° with NH4O2CH to give N-[1-(3,4-dimethoxyphenyl)-2-phenylethyl]formamide, which was treated with HCl in MeOH to give 77% α-(3,4-dimethoxyphenyl)benzeneethanamine hydrochloride. This was converted to the free base, which in MeCN was treated with 2-bromo-1-[4-phenylmethoxy-3-methylsulfonylamino]phenylethanone (preparation given) and then NaBH4 in EtOH to give title compound (II), isolated as the trifluoroacetate salt.

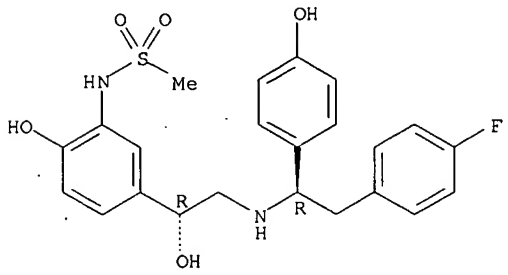
IT **170686-03-0P** **170686-04-1P** **170686-31-4P** **170687-11-3P** **170687-12-4P** **170687-29-3P**

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(preparation of catecholamine surrogates useful as β3 adrenergic agonists)

RN 170686-03-0 CAPLUS

CN Methanesulfonamide, N-[5-[(1R)-2-[[(1R)-2-(4-fluorophenyl)-1-(4-hydroxyphenyl)ethyl]amino]-1-hydroxyethyl]-2-hydroxyphenyl]- (9CI) (CA INDEX NAME)

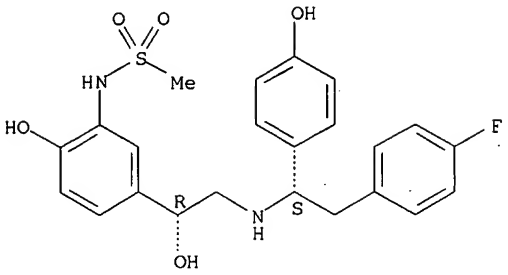
Absolute stereochemistry.



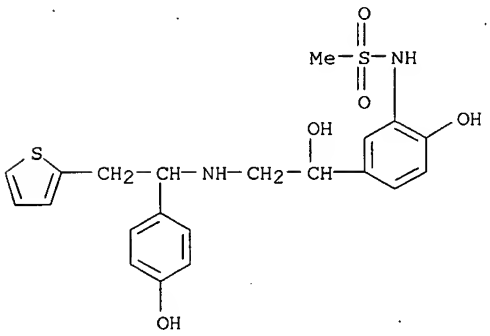
RN 170686-04-1 CAPLUS

CN Methanesulfonamide, N-[5-[(1R)-2-[[(1S)-2-(4-fluorophenyl)-1-(4-hydroxyphenyl)ethyl]amino]-1-hydroxyethyl]-2-hydroxyphenyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



RN 170686-31-4 CAPLUS
CN Methanesulfonamide, N-[2-hydroxy-5-[1-hydroxy-2-[[1-(4-hydroxyphenyl)-2-(2-thienyl)ethyl]amino]ethyl]phenyl]- (9CI) (CA INDEX NAME)

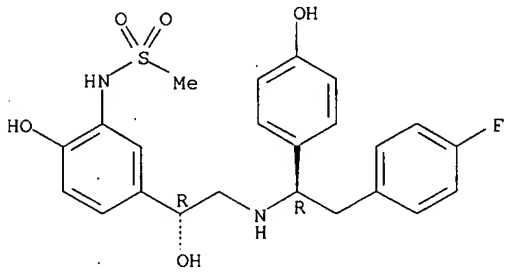


RN 170687-11-3 CAPLUS
CN Methanesulfonamide, N-[5-[(1R)-2-[[(1R)-2-(4-fluorophenyl)-1-(4-hydroxyphenyl)ethyl]amino]-1-hydroxyethyl]-2-hydroxyphenyl]-, trifluoroacetate (salt) (9CI) (CA INDEX NAME)

CM 1

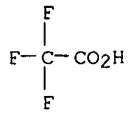
CRN 170686-03-0
CMF C23 H25 F N2 O5 S

Absolute stereochemistry.



CM 2

CRN 76-05-1
CMF C2 H F3 O2

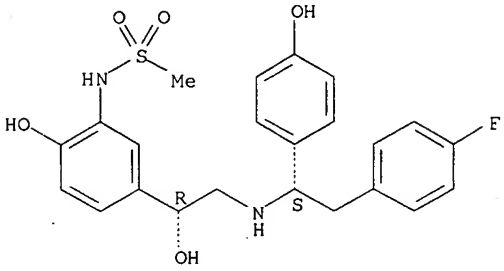


RN 170687-12-4 CAPLUS
CN Methanesulfonamide, N-[5-[(1R)-2-[[(1S)-2-(4-fluorophenyl)-1-(4-hydroxyphenyl)ethyl]amino]-1-hydroxyethyl]-2-hydroxyphenyl]-, trifluoroacetate (salt) (9CI) (CA INDEX NAME)

CM 1

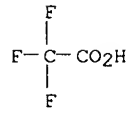
CRN 170686-04-1
CMF C23 H25 F N2 O5 S

Absolute stereochemistry.



CM 2

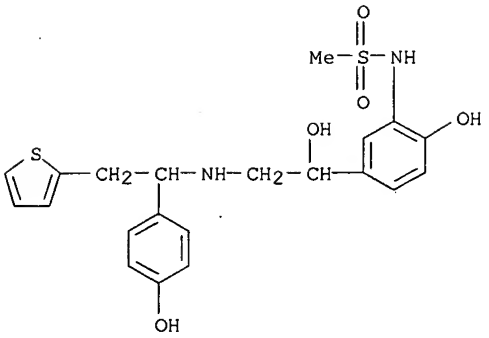
CRN 76-05-1
CMF C2 H F3 O2



RN 170687-29-3 CAPLUS
CN Methanesulfonamide, N-[2-hydroxy-5-[1-hydroxy-2-[[1-(4-hydroxyphenyl)-2-(2-thienyl)ethyl]amino]ethyl]phenyl]-, trifluoroacetate (salt) (9CI) (CA INDEX NAME)

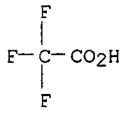
CM 1

CRN 170686-31-4
CMF C21 H24 N2 O5 S2



CM 2

CRN 76-05-1
CMF C2 H F3 O2



L24 ANSWER 38 OF 68 CAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 1995:879355 CAPLUS <<LOGINID::20061031>>
DOCUMENT NUMBER: 123:330008
TITLE: Cardiotonics containing carbostyril derivatives and catecholamines
INVENTOR(S): Mori, Toyoki; Fujiki, Hiroyuki; Ito, Shuji; Tominaga, Michiaki
PATENT ASSIGNEE(S): Otsuka Pharma Co Ltd, Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 6 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 07215873	A2	19950815	JP 1994-8715	19940128
JP 2849796	B2	19990127		

PRIORITY APPLN. INFO.: JP 1994-8715 19940128
OTHER SOURCE(S): MARPAT 123:330008

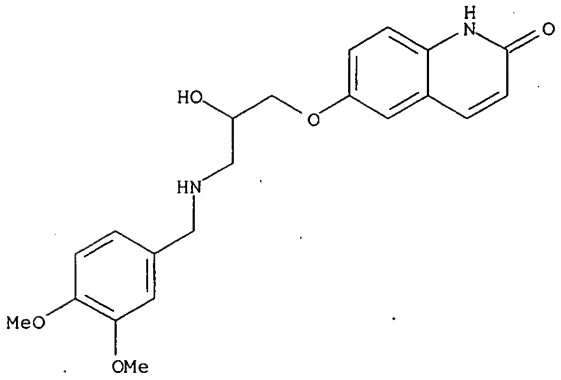
AB The cardiotonics contain ≥1 selected from carbostyril derivs. I (R1 = H, lower alkyl; R2 = lower phenylalkyl which may have lower alkoxy on the ring) and their salts and catecholamines as active ingredients. Concomitant use of I with catecholamines enhances cardiac contractility and output without inducing increase in heart rate and arrhythmia. Dobutamine was intra-arterially injected to mongrel dogs at 10 μg/kg/min and after 30 min, I [R1 = H, R2 = CH2C6H3(OMe)2-3,4] (II) was addnl. injected at 10 μg/kg/min over 60 min. Rates of changes in cardiac contractility, heart rate, and average blood pressure were 91.5, 9.0, and 0.4%, resp., vs. 59.0, 20.7, and 5.5%, resp., for a control to which a glucose solution was addnl. injected instead of II. An injection solution containing II and **dopamine** hydrochloride was also formulated.

IT **170022-77-2**
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(cardiotonics containing (aminohydroxypropoxy)carbostyrils and catecholamines without inducing tachycardia and arrhythmia)
RN 170022-77-2 CAPLUS

CN 2(1H)-Quinolinone, 6-[3-[[(3,4-dimethoxyphenyl)methyl]amino]-2-hydroxypropoxy]-, mixt. with 4-[2-[[3-(4-hydroxyphenyl)-1-methylpropyl]amino]ethyl]-1,2-benzenediol (9CI) (CA INDEX NAME)

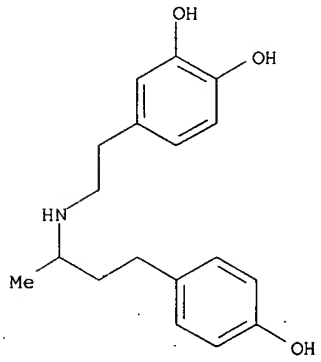
CM 1

CRN 143343-83-3
CMF C21 H24 N2 O5



CM 2

CRN 34368-04-2
CMF C18 H23 N O3



L24 ANSWER 39 OF 68 CAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 1995:473353 CAPLUS <<LOGINID::20061031>>
DOCUMENT NUMBER: 122:281318
TITLE: Chromatographic investigation and computer simulation of (-)deprenyl metabolism
AUTHOR(S): Tarjanyi, Zsofia; Kalasz, H.; Darvas, F.; Kerecsen, L.; Valko, Klara; Pucsok, J.
CORPORATE SOURCE: CompuDrug Ltd., Budapest, H-1395, Hung.
SOURCE: New Approaches Chromatogr. '93, [Pap. Budapest Chromatogr. Conf.] (1993), Meeting Date 1990, 243-60. Editor(s): Kalasz, H.; Ettre, L. S.; Pick, Judit. Fekete Sas Kiado: Budapest, Hung.
CODEN: 60SWAU
DOCUMENT TYPE: Conference
LANGUAGE: English
AB Chromatog. studies on metabolism of (-)deprenyl have shown that its urine elimination takes place after oxidative alterations on the nitrogen. N-demethylated, N-depropargylated and N-demethylated-N-depropargylated

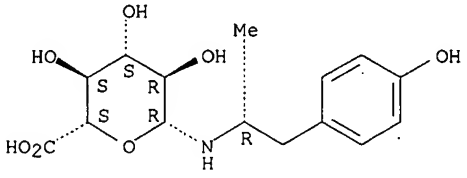
metabolic products were identified by 2-dimensional TLC. Gas chromatog.-mass spectrometry verified that a substantial amount of p-hydroxypropargylanara and trace amount of p-hydroxymethamphetamine are also among the **metabolites** of deprenyl in rats.

IT **162927-89-1**
RL: ANT (Analyte); BSU (Biological study, unclassified); MFM (Metabolic formation); ANST (Analytical study); BIOL (Biological study); FORM (Formation, nonpreparative)
(chromatog. and computer simulation of deprenyl metabolism)

RN 162927-89-1 CAPLUS

CN β-D-Glucopyranuronic acid, 1-deoxy-1-[[2-(4-hydroxyphenyl)-1-methylethyl]amino]-, (R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).



L24 ANSWER 40 OF 68 CAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 1995:460394 CAPLUS <<LOGINID::20061031>>

DOCUMENT NUMBER: 122:285644

TITLE: Evaluation of 99mTc-labeled modified serum albumin for tumor detection

AUTHOR(S): Guerdoud, L. M.; Ouellet, R.; Lier, J. E. Van

CORPORATE SOURCE: Faculty Medicine, University Sherbrooke, Sherbrooke, QC, J1H 5N4, Can.

SOURCE: Nuclear Medicine and Biology (1994), 21(8), 1101-8
CODEN: NMBIEO; ISSN: 0883-2897

DOCUMENT TYPE: Journal

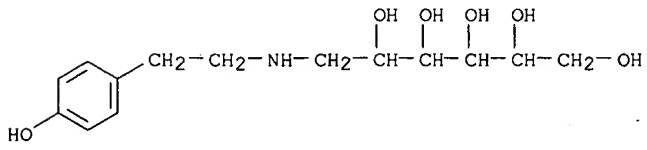
LANGUAGE: English

AB Serum albumin (SA) modified and labeled with 131I-tyramine N-1'-**deoxysorbitol** (131I-TDS) has been shown to localize in tumors [Sinn et al., (1990) Nucl. Med. Biol. Part B 17, 819-827]. We prepared similar TDS complexes labeled with 99mTc and evaluated their potential for tumor imaging. Derivatization of SA with TDS was optimized using cyanuric chloride or 1-ethyl-3-(3-dimethylaminopropyl)-carbodiimide (EDAC) as coupling agents. A high TDS loading yield of 38 mol/mol SA was obtained with the latter reagent. Modified SA (8 and 38 mol TDS/mol SA) were labeled with 99mTc via the stannous reduction method and injected i.v. into EMT-6 tumor bearing mice. 125I-TDS-SA (8 mol 125I-TDS/mol SA) revealed a high tumor uptake of 10% ID/g at 3 h postinjection. The 99mTc-labeled SA and TDS-SA complexes lacked tumor specificity, instead TDS loading of SA resulted in increased liver/spleen uptake, suggesting colloid formation. This study confirms the potential of modified SA for tumor imaging but highlights the importance of choice of radioisotope, as well as site of attachment of the radiolabel to the modified SA for optimal tumor localization.

IT **133368-61-3**
RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)
(99mTc-labeled modified serum albumin evaluation for tumor imaging)

RN 133368-61-3 CAPLUS

CN D-Glucitol, 1-deoxy-1-[[2-(4-hydroxyphenyl)ethyl]amino]- (9CI) (CA INDEX NAME)



L24 ANSWER 41 OF 68 CAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 1995:315547 CAPLUS <<LOGINID::20061031>>
DOCUMENT NUMBER: 122:188019
TITLE: Preparation of substrate-spacer-active substance prodrugs
INVENTOR(S): Bosslet, Klaus; Czech, Joerg; Hoffmann, Dieter; Kolar, Cenek; Tillequin, Francois; Florent, Jean Claude; Azoulay, Michel; Monneret, Claude; Jacquesy, Jean Claude; et al.
PATENT ASSIGNEE(S): Behringwerke AG, Germany
SOURCE: Ger. Offen., 17 pp.
CODEN: GWXXBX
DOCUMENT TYPE: Patent
LANGUAGE: German
FAMILY ACC. NUM. COUNT: 2
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
DE 4236237	A1	19940428	DE 1992-4236237	19921027
EP 647450	A1	19950412	EP 1993-114475	19930909
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LI, LU, NL, PT, SE				
EP 595133	A2	19940504	EP 1993-116702	19931015
EP 595133	A3	19981104		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LI, LU, NL, PT, SE				
IL 107398	A1	20010128	IL 1993-107398	19931025
CA 2109259	AA	19940428	CA 1993-2109259	19931026
CA 2109259	C	20050524		
NO 9303854	A	19940428	NO 1993-3854	19931026
NO 311830	B1	20020204		
AU 9350225	A1	19940512	AU 1993-50225	19931026
AU 669218	B2	19960530		
JP 06293665	A2	19941021	JP 1993-266976	19931026
ZA 9307951	A	19950705	ZA 1993-7951	19931026
US 5955100	A	19990921	US 1995-449021	19950524
US 6146658	A	20001114	US 1997-859084	19970520

PRIORITY APPLN. INFO.:
DE 1992-4236237 19921027
US 1993-140825 A3 19931025
US 1995-449021 A1 19950524

AB Compds. of the form substrate-spacer-active substance, where the substrate and spacer are cleaved under physiol. or pathophysiol. conditions, the substrate is not an amino acid or peptide residue, and the active ingredient is a chemical compound with biol. activity or a derivative thereof, with the exception of N-bonded derivs. of anthracycline, paranitroanilide, or cytosine arabinoside, were prepared Thus, 3'-N-fluorenylmethoxycarbonyldoxorubicin in PhMe was treated with diisopropylethylamine and diphosgene; after 1 h 4-(6-O-methyl-β-D-glucuronyloxy)-3-nitrobenzylamine and diisopropylethylamine in DMF were added and the mixture was stirred 14 h to give, after deprotection, 14-O-[4-(β-D-glucuronyloxy)-3-nitrobenzylaminocarbonyl]doxorubicin (I). I showed an acute LD50 in mice of >1500 mg/kg, vs. 20 mg/kg for doxorubicin itself. I at 500 mg/kg in mice implanted with human LOVO colon tumors showed a T/C = 40.0%.

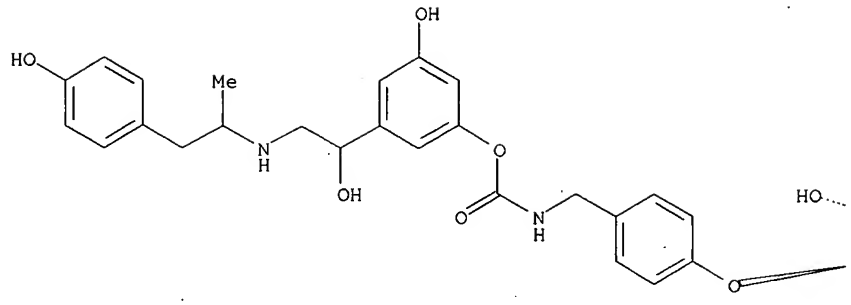
IT **160527-87-7P**
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of, as prodrug)

RN 160527-87-7 CAPLUS

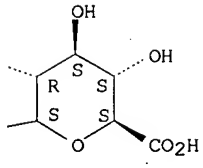
CN β-D-Glucopyranosiduronic acid, 4-[[[[3-hydroxy-5-[1-hydroxy-2-[[2-(4-hydroxyphenyl)-1-methylethyl]amino]ethyl]phenoxy]carbonyl]amino]methyl]phenyl (9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A



PAGE 1-B



L24 ANSWER 42 OF 68 CAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 1994:548256 CAPLUS <<LOGINID::20061031>>
DOCUMENT NUMBER: 121:148256
TITLE: Altered pharmacokinetic properties of a lipophilically derivatized low-molecular-weight heparin in rats
AUTHOR(S): Stehle, Gerd; Sinn, Hannsjoerg; Friedrich, Eckhard A.; Wunder, Andreas; Schrenk, Hans Hermann; Harenberg, Job; Peschke, Peter; Dempfle, Carl Erik; Maier-Borst, Wolfgang; Heene, Dieter Ludwig
CORPORATE SOURCE: Fac. Clin. Med., Univ. Heidelberg, Mannheim, Germany
SOURCE: Journal of Laboratory and Clinical Medicine (1993), 122(6), 728-38
CODEN: JLCMAK; ISSN: 0022-2143
DOCUMENT TYPE: Journal
LANGUAGE: English

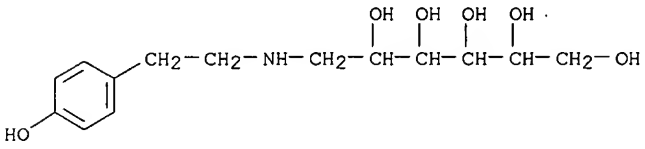
AB A new generation of lipophilic heparins has been developed that show longer-lasting inhibitory effects on the coagulation system. The authors have studied the radiopharmacokinetics of a derivatized low-mol.-weight heparin (LMWH) with a residualizing lipophilic tyramine-**deoxysorbitol** label in comparison with conventional LMWH after i.v. application into Wistar rats. Whole body scintigraphy and anal. of the blood and organ distribution of different tracer prepns. revealed that the lipophilically derivatized LMWH substance was predominantly trapped in the liver RES by a scavenger receptor-mediated mechanism. After the saturable uptake mechanism was blocked by maleylated bovine serum albumin, 41.4% of the lipophilic LMWH tracer circulated in blood, as compared with 18.4% of the control and 1% of conventional LMWH. The same results were attained by a competition experiment with an excess of unfractionated heparin. Urinary excretion of the lipophilic tracer among the rats in this competition experiment was considerably lower (13.7%) as compared with conventional LMWH (53.0%). Expts. with lipophilic LMWH tracer bound nonspecifically to rat serum albumin confirmed that the prolonged half-life might in part be due to an increased affinity for albumin. About 59% of the activity of the lipophilic tracer bound to albumin was found in the liver reticuloendothelial system, and only 3.3% were excreted

to urine 3 h after injection. Further studies are necessary to evaluate the accumulation rates and the metabolic fate of lipophilically derivatized heparins in the case of an impeded reticuloendothelial system uptake before attempts are made to therapeutically apply these compds.

IT **133368-61-3D**, heparin derivative
RL: BIOL (Biological study)
(pharmacokinetics and liver reticuloendothelial system uptake of)

RN 133368-61-3 CAPLUS

CN D-Glucitol, 1-deoxy-1-[[2-(4-hydroxyphenyl)ethyl]amino]- (9CI) (CA INDEX NAME)



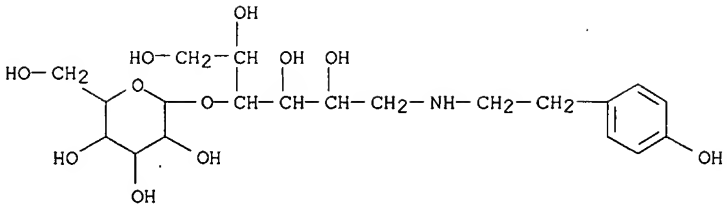
L24 ANSWER 43 OF 68 CAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 1991:549691 CAPLUS <<LOGINID::20061031>>
DOCUMENT NUMBER: 115:149691
TITLE: Fate of intravenously injected aminated β(1 → 3) polyglucose derivatized with 125I-tyraminyl cellobiose
AUTHOR(S): Smedsroed, Baard; Seljelid, Rolf
CORPORATE SOURCE: Inst. Med. Biol., Univ. Tromso, Tromso, Norway
SOURCE: Immunopharmacology (1991), 21(3), 149-58
CODEN: IMMUDP; ISSN: 0162-3109
DOCUMENT TYPE: Journal
LANGUAGE: English

AB Aminated β(1→3)glucan (polyglucose, AG), a potent soluble immunomodulator, was radio-iodinated and traced after i.v. administration to rats. The finding that 60 min after injection most of the radioactivity was recovered in the kidneys and urine, together with the results from gel chromatog. showing that the low Mw fraction of the injected material disappeared first from the circulation, suggests that the initial rapid phase of elimination is due mainly to glomerular filtration. The mols. that are too large for kidney excretion are taken up mainly by the liver (about 10% of injected dose) at a slower speed. Several days after injection the liver contained nearly 90% of the recovered radioactivity, whereas the kidneys and other organs contained only insignificant amts. This indicates that radioactivity associated with the kidneys after 60 min reflects glomerular filtration, whereas radioactivity in liver results from uptake leading to lysosomal accumulation. Isolation of liver cells injection disclosed that the radioactivity per cell was the same in Kupffer cells (KC) and liver endothelial cells (LEC), whereas the uptake per parenchymal cell (PC) was about 30% of the uptake per KC and LEC. It could be calculated that the intact liver, the population of PC was responsible for 50% of the uptake, whereas the populations of LEC and KC contained 35% and 15%, resp., of the total liver radioactivity. These findings raise the question whether not only KC, but also LEC and PC may be mediators of the immune responses caused by β(1→3) polyglucose.

IT **98574-93-7D**, polyglucose **conjugates**, iodine-125 labeled
RL: BIOL (Biological study)
(liver uptake of, endothelial and Kupffer and parenchymal cells role in)

RN 98574-93-7 CAPLUS

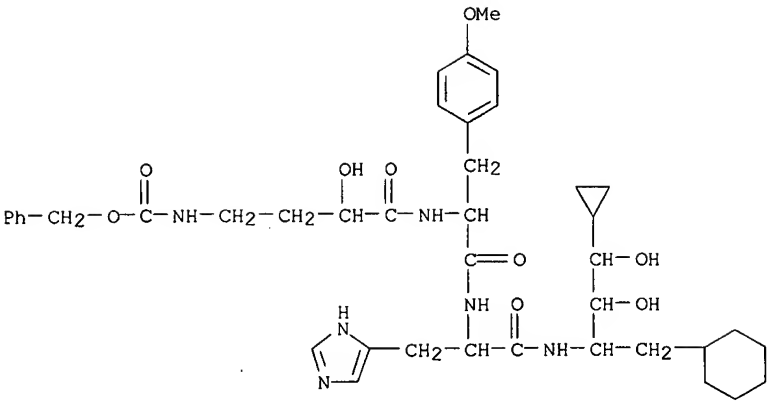
CN D-Glucitol, 1-deoxy-4-O-β-D-glucopyranosyl-1-[[2-(4-hydroxyphenyl)ethyl]amino]- (9CI) (CA INDEX NAME)



L24 ANSWER 44 OF 68 CAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 1991:472226 CAPLUS <<LOGINID::20061031>>
DOCUMENT NUMBER: 115:72226
TITLE: Amino acid derivatives
INVENTOR(S): Branca, Quirico; Neidhart, Werner; Ramuz, Henri; Stadler, Heinz; Wostl, Wolfgang
PATENT ASSIGNEE(S): Hoffmann-La Roche, F., und Co. A.-G., Switz.
SOURCE: Eur. Pat. Appl., 71 pp.
CODEN: EPXXDW
DOCUMENT TYPE: Patent
LANGUAGE: German
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 416373	A2	19910313	EP 1990-116088	19900822
EP 416373	A3	19920527		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE				
CA 2023099	AA	19910305	CA 1990-2023099	19900810
AU 9061360	A1	19910307	AU 1990-61360	19900827
AU 646640	B2	19940303		
ZA 9006856	A	19910626	ZA 1990-6856	19900828
HU 58060	A2	19920128	HU 1990-5676	19900829
JP 03099047	A2	19910424	JP 1990-228473	19900831
NO 9003832	A	19910305	NO 1990-3832	19900903
US 5688946	A	19971118	US 1994-277111	19940719
PRIORITY APPLN. INFO.:			CH 1989-3192 A	19890904
			CH 1990-2336 A	19900712
			US 1990-571689 B1	19900823

OTHER SOURCE(S): MARPAT 115:72226
AB Amino acid derivs. RCONR1CH(CH2R2)CONHCHR3CHR4CR5R6R7 (R-R7 = substituents) were prepared for use as antihypertensives and renin inhibitors. Thus, amide I was prepared from epoxide II, H-His-OMe.2HCl, and (S)-PhCH2CH(CO2H)CH2SO2CMe3 in 5 steps. I had a renin-inhibiting ED50 of 0.0009 μM/L.
IT **134363-69-2P**
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation and deblocking of)
RN 134363-69-2 CAPLUS
CN L-Histidinamide, N-[2-hydroxy-1-oxo-4-[[(phenylmethoxy)carbonyl]amino]butyl]-O-methyl-N-[1-(cyclohexylmethyl)-3-cyclopropyl-2,3-dihydroxypropyl]-, [1(S),2[1S-(1R*,2S*,3R*)]]- (9CI) (CA INDEX NAME)



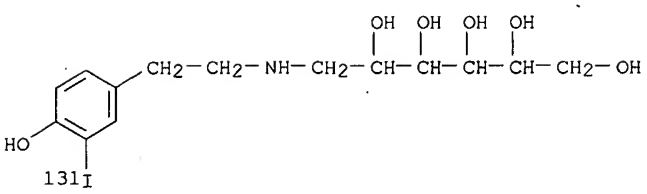
L24 ANSWER 45 OF 68 CAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 1991:247676 CAPLUS <<LOGINID::20061031>>
DOCUMENT NUMBER: 114:247676
TITLE: Preparation of (radioactive) polyalcohol-protein **conjugates** for tumor diagnosis and/or treatment
INVENTOR(S): Sinn, Hansjoerg; Schrenk, Hans Hermann; Maier-Borst, Wolfgang; Friedrich, Eckhard; Graschew, Georgi; Woehrle, Dieter
PATENT ASSIGNEE(S): Hoechst A.-G., Germany
SOURCE: Ger. Offen., 16 pp.
CODEN: GWXXBX
DOCUMENT TYPE: Patent
LANGUAGE: German
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
DE 3912792	A1	19901025	DE 1989-3912792	19890419
EP 398024	A1	19901122	EP 1990-107187	19900314
EP 398024	B1	19930224		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE				
AT 85894	E	19930315	AT 1990-107187	19900314
ES 2054137	T3	19940801	ES 1990-107187	19900314
JP 03034999	A2	19910214	JP 1990-100546	19900418
JP 08019156	B4	19960228		
US 5308604	A	19940503	US 1992-859273	19920326
PRIORITY APPLN. INFO.:			DE 1989-3912792 A	19890419
			EP 1990-107187 A	19900314
			US 1990-509810 B1	19900417
			US 1991-734123 B1	19910725

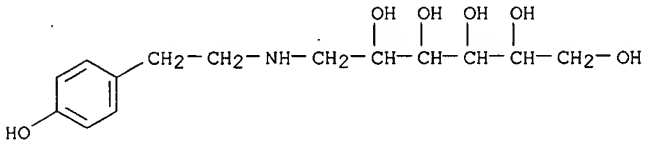
AB **Conjugates** containing a) ≥1 (derivatized) polyalc., b) ≥1 (radio)active moiety, c) ≥1 linking group, and d) a protein were prepared for tumor diagnosis/therapy. Thus, a mixture of tyramine hydrochloride, D-glucose, and NaBH4 in HOCH2CH2OH was heated 30 min at 100° to give 75-80% tyramine-N-1'-**desoxysorbitol**. The latter was radioiodinated with 131I/NaOCl in pH 7.4 buffer in 95-98% yield; the product was condensed with cyanuric chloride in dioxane followed by rat serum albumin in pH 8.3 phosphate buffer to give I (X = rat serum albumin). I selectively concentrated in ovary carcinoma implants in rats.

IT **133368-66-8P**
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation and condensation of, with cyanuric chloride)

RN 133368-66-8 CAPLUS
CN D-Glucitol, 1-deoxy-1-[[2-[4-hydroxy-3-(iodo-131I)phenyl]ethyl]amino]- (9CI) (CA INDEX NAME)

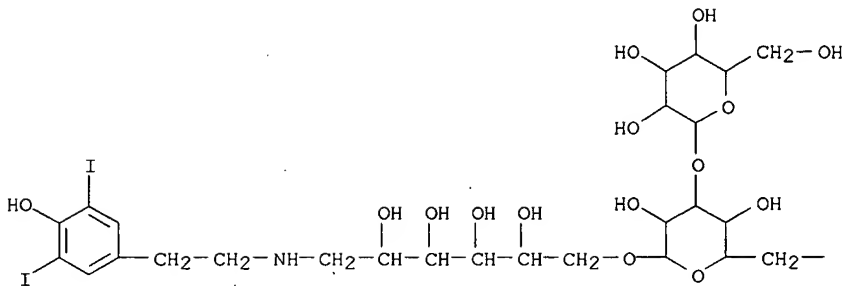


IT **133368-61-3P**
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation and radioiodination of)
RN 133368-61-3 CAPLUS
CN D-Glucitol, 1-deoxy-1-[[2-(4-hydroxyphenyl)ethyl]amino]- (9CI) (CA INDEX NAME)

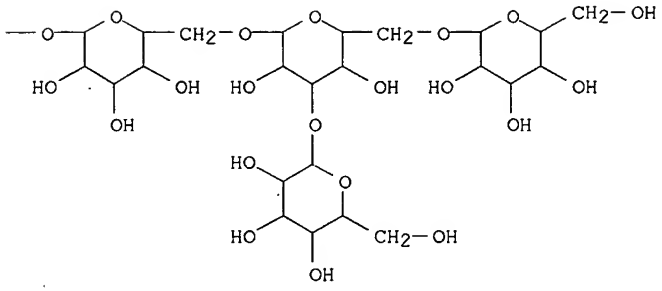


L24 ANSWER 46 OF 68 CAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 1991:244392 CAPLUS <<LOGINID::20061031>>
DOCUMENT NUMBER: 114:244392
TITLE: Structure-activity relationships of oligo-β-glucoside elicitors of phytoalexin accumulation in soybean
AUTHOR(S): Cheong, Jong Joo; Birberg, Winnie; Fugedi, Peter; Pilotti, Aake; Garegg, Per J.; Hong, Namgi; Ogawa, Tomoya; Hahn, Michael G.
CORPORATE SOURCE: Complex Carbohydr. Res. Cent., Univ. Georgia, Athens, GA, 30602, USA
SOURCE: Plant Cell (1991), 3(2), 127-36
CODEN: PLCEEW; ISSN: 1040-4651
DOCUMENT TYPE: Journal
LANGUAGE: English
AB The branched trisaccharide at the nonreducing end of the oligoglucosides was found to be essential for maximum elicitor activity. Substitutions of either the nonreducing terminal backbone glucosyl residue or the side-chain glucosyl residue closest to the nonreducing end with glucosaminyl or N-acetylglucosaminyl residues reduced the elicitor activity of the oligoglucosides between 10-fold and 10,000-fold. Elicitor activity was also reduced 1000-fold if the 2 side-chain glucosyl residues were attached to adjacent backbone glucosyl residues rather than to glucosyl residues separated by an unbranched residue. In contrast, modifications of the reducing terminal glucosyl residue of an elicitor-active hepta-β-glucoside by **conjugation** with tyramine and subsequent iodination had no significant effect on the elicitor activity of the hepta-β-glucoside. These results demonstrate that oligo-β-glucosides must have a specific structure to trigger the signal transduction pathway, which ultimately leads to the de novo synthesis of phytoalexins in soybean.
IT **133960-38-0**
RL: BIOL (Biological study)
(phytoalexin accumulation in soybean cotyledons response to, structure in relation to)
RN 133960-38-0 CAPLUS
CN D-Glucitol, O-β-D-glucopyranosyl-(1→3)-O-[O-β-D-glucopyranosyl-(1→3)-O-[β-D-glucopyranosyl-(1→6)]-O-β-D-glucopyranosyl-(1→6)-β-D-glucopyranosyl-(1→6)]-O-β-D-glucopyranosyl-(1→6)-1-deoxy-1-[[2-(4-hydroxy-3,5-diiodophenyl)ethyl]amino]- (9CI) (CA INDEX NAME)

PAGE 1-A



PAGE 1-B

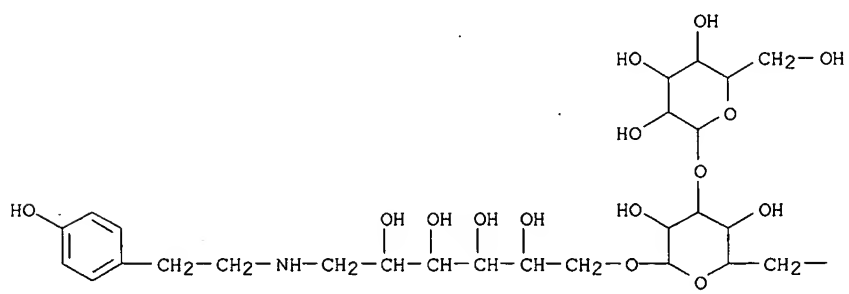


IT **133960-18-6P**
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation and iodination of, phytoalexin-inducing activity in soybean cotyledons in relation to)

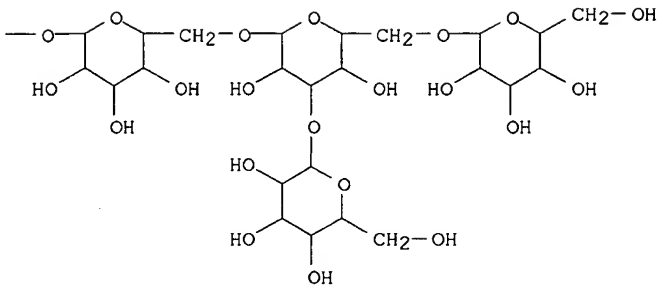
RN 133960-18-6 CAPLUS

CN D-Glucitol, O-β-D-glucopyranosyl-(1→3)-O-[O-β-D-glucopyranosyl-(1→3)-O-[β-D-glucopyranosyl-(1→6)]-O-β-D-glucopyranosyl-(1→6)-β-D-glucopyranosyl-(1→6)]-O-β-D-glucopyranosyl-(1→6)-1-deoxy-1-[[2-(4-hydroxyphenyl)ethyl]amino]- (9CI) (CA INDEX NAME)

PAGE 1-A

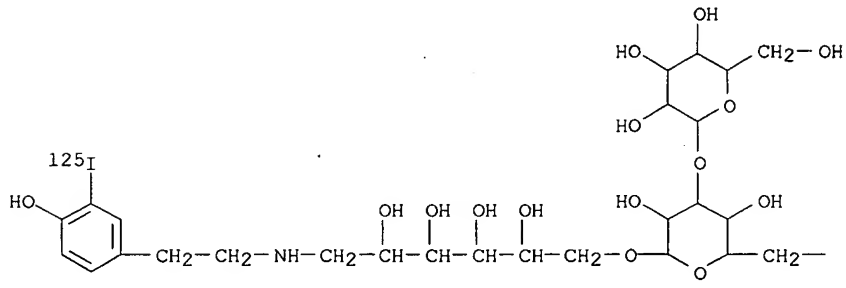


PAGE 1-B



IT **133960-11-9P 133960-20-0P**
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation and phytoalexin inducing activity of, in soybean cotyledons)
RN 133960-11-9 CAPLUS
CN D-Glucitol, O-β-D-glucopyranosyl-(1→3)-O-[O-β-D-glucopyranosyl-(1→3)-O-[β-D-glucopyranosyl-(1→6)]-O-β-D-glucopyranosyl-(1→6)-β-D-glucopyranosyl-(1→6)]-O-β-D-glucopyranosyl-(1→6)-1-deoxy-1-[[2-(4-hydroxy-3-iodophenyl)ethyl]amino]- (9CI) (CA INDEX NAME)

PAGE 1-A



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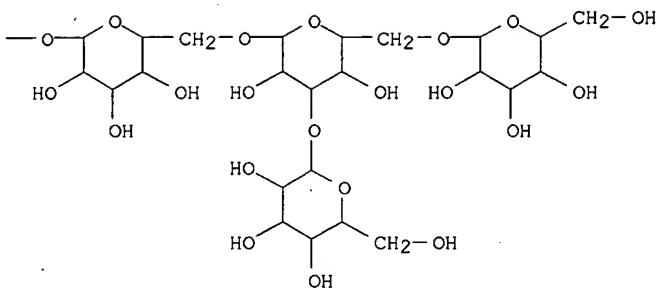
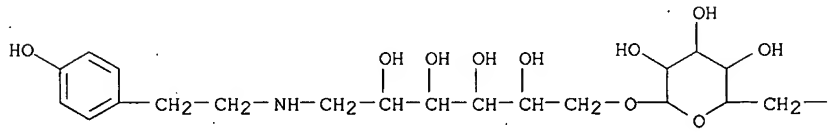
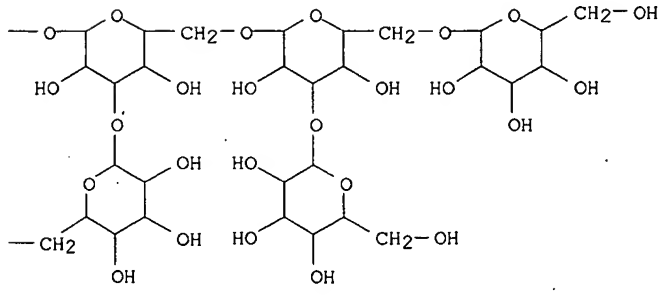


RN 133960-20-0 CAPLUS
CN D-Glucitol, O-β-D-glucopyranosyl-(1→3)-O-[O-β-D-glucopyranosyl-(1→3)-O-[β-D-glucopyranosyl-(1→6)]-β-D-glucopyranosyl-(1→6)]-O-β-D-glucopyranosyl-(1→6)-O-β-D-glucopyranosyl-(1→6)-1-deoxy-1-[[2-(4-hydroxyphenyl)ethyl]amino]- (9CI) (CA INDEX NAME)

PAGE 1-A



PAGE 1-B



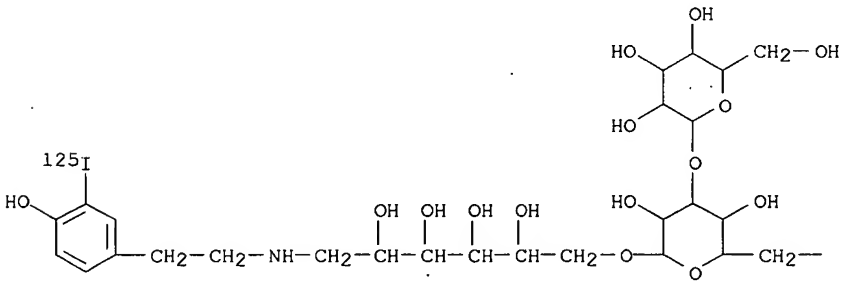
L24 ANSWER 47 OF 68 CAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 1991:244263 CAPLUS <<LOGINID::20061031>>
DOCUMENT NUMBER: 114:244263
TITLE: A specific, high-affinity binding site for the hepta-β-glucoside elicitor exists in soybean membranes
AUTHOR(S): Cheong, Jong Joo; Hahn, Michael G.
CORPORATE SOURCE: Complex Carbohydr. Res. Cent., Univ. Georgia, Athens, GA, 30602, USA
SOURCE: Plant Cell (1991), 3(2), 137-47
CODEN: PLCEEW; ISSN: 1040-4651
DOCUMENT TYPE: Journal
LANGUAGE: English

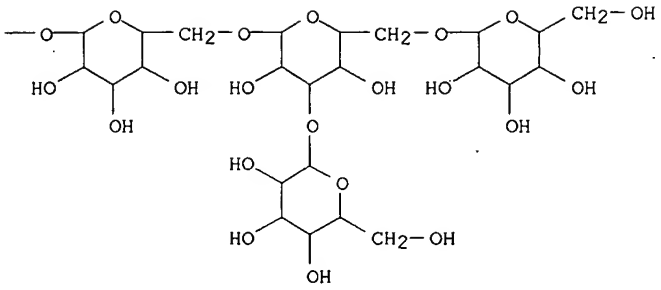
AB The presence of a specific binding site for a hepta-β-glucoside elicitor of phytoalexin accumulation has been demonstrated in soybean microsomal membranes. A tyramine **conjugate** of the elicitor-active hepta-β-glucoside was prepared and radiolabeled with 125I. The labeled hepta-β-glucoside-tyramine **conjugate** was used as a ligand in binding assays with a total membrane fraction prepared from soybean roots. Binding of the radiolabeled hepta-β-glucoside elicitor was saturable, reversible, and with an affinity (apparent Kd = 7.5 + 10-10 M) comparable with the concentration of hepta-β-glucoside required for biol. activity. A single class of hepta-β-glucoside binding sites was found. The binding sites was inactivated by proteolysis and by heat treatment, suggesting that the binding site is a protein or glycoprotein. Competitive inhibition of binding of the radiolabeled hepta-β-glucoside elicitor by a number of structurally related oligoglucosides demonstrated a direct correlation between the binding affinities and the elicitor activities of these oligoglucosides.

IT **133960-11-9P**
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation and binding of, in soybean membranes, receptor characterization in relation to)

RN 133960-11-9 CAPLUS
CN D-Glucitol, O-β-D-glucopyranosyl-(1→3)-O-[O-β-D-glucopyranosyl-(1→3)-O-[β-D-glucopyranosyl-(1→6)]-O-β-D-glucopyranosyl-(1→6)-β-D-glucopyranosyl-(1→6)]-O-β-D-glucopyranosyl-(1→6)-1-deoxy-1-[[2-(4-hydroxy-3-iodophenyl)ethyl]amino]- (9CI) (CA INDEX NAME)

PAGE 1-A



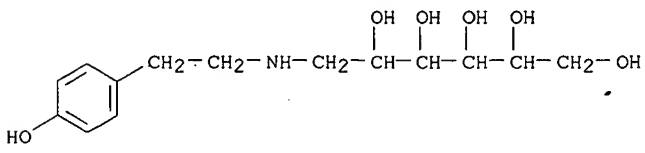


L24 ANSWER 48 OF 68 CAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 1991:181405 CAPLUS <<LOGINID::20061031>>
DOCUMENT NUMBER: 114:181405
TITLE: Design of compounds having an enhanced tumor uptake, using serum albumin as a carrier. Part I
AUTHOR(S): Sinn, H.; Schrenk, H. H.; Friedrich, E. A.; Schilling, U.; Maier-Borst, W.
CORPORATE SOURCE: Inst. Radiol. Pathophysiol., Dtsch. Krebsforschungszent., Heidelberg, D-6900, Germany
SOURCE: Nuclear Medicine and Biology (1990), 17(8), 819-27
CODEN: NMBIEO; ISSN: 0883-2897
DOCUMENT TYPE: Journal
LANGUAGE: English

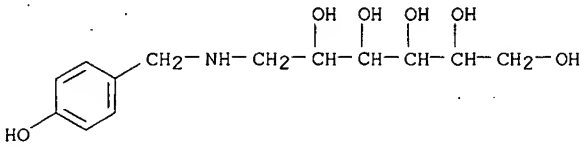
AB To identify those parameters which influence the tumor uptake and storage, a series of compds. having different chemical and physicochem. properties was investigated. Unbound, small mol. weight compds. were rapidly eliminated from the circulatory system. They has a prolonged biol. half life if linked to serum albumin (SA), especially when derivatized with **deoxysorbitol**. Parallel with the prolongation of the biol. half-life a remarkable increase in tumor uptake was observed, which was not accompanied by increased liver activity. Furthermore, without thyroid blockade, significant radioiodine uptake in this organ was not defected after 24 or 72 h. This is due to the particular coupling mechanism, which may be relevant for other (radio)iodinated pharmaceuticals used in medicine. Glucose and aromatic amines, as well as aromatic aldehydes and glucamine react to form **deoxysorbitol** derivs., which then have similar biokinetics after linkage to serum albumin. Thus, a new approach in tumor detection and possibly in tumor therapy may be possible when SA is used as a carrier mol., using the described labeling procedure.

IT **133368-61-3P 133368-62-4P**
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation and radioiodination of, tumor uptake in relation to)

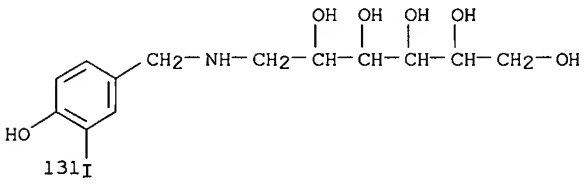
RN 133368-61-3 CAPLUS
CN D-Glucitol, 1-deoxy-1-[[2-(4-hydroxyphenyl)ethyl]amino]- (9CI) (CA INDEX NAME)



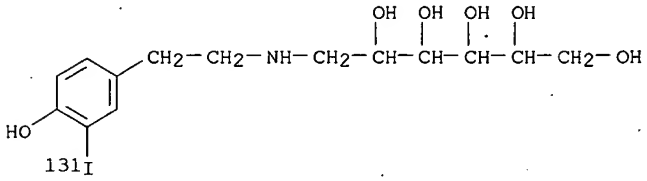
RN 133368-62-4 CAPLUS
CN D-Glucitol, 1-deoxy-1-[[(4-hydroxyphenyl)methyl]amino]- (9CI) (CA INDEX NAME)



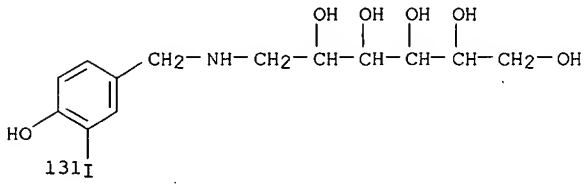
IT **133368-65-7DP**, reaction products with cyanuric chloride
133368-66-8DP, reaction products with cyanuric chloride
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of, for tumor targeting)
RN 133368-65-7 CAPLUS
CN D-Glucitol, 1-deoxy-1-[[[4-hydroxy-3-(iodo-131I)phenyl]methyl]amino]- (9CI) (CA INDEX NAME)



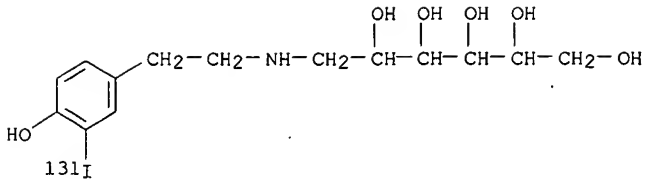
RN 133368-66-8 CAPLUS
CN D-Glucitol, 1-deoxy-1-[[2-[4-hydroxy-3-(iodo-131I)phenyl]ethyl]amino]- (9CI) (CA INDEX NAME)



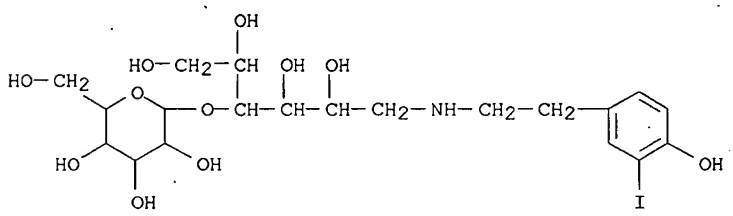
IT **133368-65-7P** **133368-66-8P**
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of, for tumor targeting with serum albumin as carrier)
RN 133368-65-7 CAPLUS
CN D-Glucitol, 1-deoxy-1-[[[4-hydroxy-3-(iodo-131I)phenyl]methyl]amino]- (9CI) (CA INDEX NAME)



RN 133368-66-8 CAPLUS
CN D-Glucitol, 1-deoxy-1-[[2-[4-hydroxy-3-(iodo-131I)phenyl]ethyl]amino]- (9CI) (CA INDEX NAME)



L24 ANSWER 49 OF 68 CAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 1988:419814 CAPLUS <<LOGINID::20061031>>
DOCUMENT NUMBER: 109:19814
TITLE: Purification of residualizing **glycoconjugate** labels for protein by reversed-phase high-pressure liquid chromatography
AUTHOR(S): Baynes, John W.; Maxwell, Janet L.; Rahman, Kazi M.; Thorpe, Suzanne R.
CORPORATE SOURCE: Sch. Med., Univ. South Carolina, Columbia, SC, 29208, USA
SOURCE: Analytical Biochemistry (1988), 170(2), 382-6
CODEN: ANBCA2; ISSN: 0003-2697
DOCUMENT TYPE: Journal
LANGUAGE: English
AB The synthesis and purification of a new fluorescent residualizing label, N,N-**dilactitol**-N'-fluoresceinyl-ethylenediamine, is described. The label is prepared by first derivatizing ethylenediamine 1:1 with FITC and then coupling lactose to the remaining primary amino group by reductive amination. A rapid 1-step purification of this and other **glycoconjugate** labels by reversed-phase HPLC is described.
IT **114932-65-9**
RL: ANT (Analyte); ANST (Analytical study)
(chromatog. of, reversed-phase high-performance liquid)
RN 114932-65-9 CAPLUS
CN D-Glucitol, 1-deoxy-4-O-β-D-galactopyranosyl-1-[[2-(4-hydroxy-3-iodophenyl)ethyl]amino]- (9CI) (CA INDEX NAME)



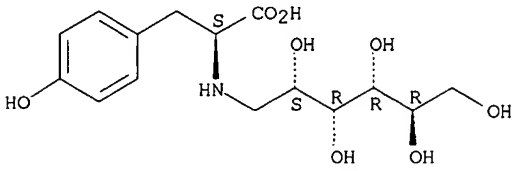
L24 ANSWER 50 OF 68 CAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 1987:571746 CAPLUS <<LOGINID::20061031>>
DOCUMENT NUMBER: 107:171746
TITLE: Analysis of glycated amino acids by high-performance liquid chromatography of phenylthiocarbamyl derivatives
AUTHOR(S): Walton, Donald J.; McPherson, John D.
CORPORATE SOURCE: Dep. Biochem., Queen's Univ., Kingston, ON, K7L 3N6, Can.
SOURCE: Analytical Biochemistry (1987), 164(2), 547-53
CODEN: ANBCA2; ISSN: 0003-2697
DOCUMENT TYPE: Journal
LANGUAGE: English
AB A method has been developed for the anal. of hexitolamino acids formed by acid-catalyzed hydrolysis of nonenzymically glycated proteins that have been treated with sodium borohydride. The hexitolamino acids are converted into phenylthiocarbamyl (PTC) derivs. which are analyzed by reverse-phase HPLC. The PTC derivs. of Nα-hexitolamino acids behave

like lactones, migrating on the column more slowly than the corresponding PTC-amino acids. The PTC derivs. of Nε- **glucitol**- and Nε- **mannitol**-lysine are probably free acids, since they migrate faster than PTC-lysine. The method, which can be used to determine the degree of glycation of N-terminal and lysyl residues, has been applied successfully to human Hb, serum albumin, and ocular lens proteins.

IT **57170-81-7 106188-44-7**
RL: ANT (Analyte); ANST (Analytical study)
(chromatog. of, reversed-phase high-performance liquid)

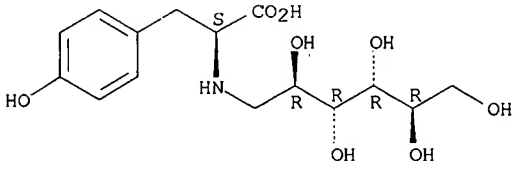
RN 57170-81-7 CAPLUS
CN L-Tyrosine, N-(1-deoxy-D-glucitol-1-yl)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



RN 106188-44-7 CAPLUS
CN L-Tyrosine, N-(1-deoxy-D-mannitol-1-yl)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



L24 ANSWER 51 OF 68 CAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 1987:432609 CAPLUS <<LOGINID::20061031>>
DOCUMENT NUMBER: 107:32609
TITLE: Structure-activity relationships of β-adrenergic receptor-coupled adenylate cyclase: implications of a redox mechanism for the action of agonists at β-adrenergic receptors
AUTHOR(S): Wong, Angela; Hwang, Shing Mei; Cheng, Hung Yuan; Crooke, Stanley T.
CORPORATE SOURCE: Dep. Mol. Pharmacol., Smith Kline and French Lab., Swedeland, PA, 19479, USA
SOURCE: Molecular Pharmacology (1987), 31(4), 368-76
CODEN: MOPMA3; ISSN: 0026-895X
DOCUMENT TYPE: Journal
LANGUAGE: English

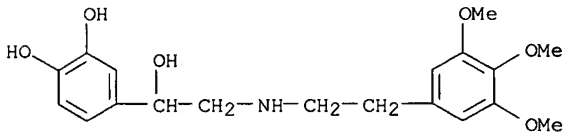
AB To test the hypothesis that agonists at β-adrenergic receptors activate the β-receptors by reducing them, the interactions of 41 β-agonists and antagonists with the receptors were examined The structural features which determined binding affinity (KD) were distinct from those which determined intrinsic activity (IA). The IA was related to the oxidation-reduction properties, which were determined primarily by the nature of the substituents on the Ph ring. Thus, the parent compound phenylethanolamine, having no phenolic substituent, acted as an antagonist (IA = 0) and was also redox inactive. All of the antagonists tested (19) exhibited EP(peak potential for the first oxidative wave) values greater than 0.75 V, suggesting that they were difficult to oxidize. Agonists, however, exhibited a wide range of EP(0.25-0.7 V) with values lower than those of the antagonists. The agonists tested include catecholamines, catecholamine analogs bearing meta-substituted amino functionalities (such as amino, methylamino, formanilide, **sulfonamide**, urea, and carbamate), resorcinol, and hydroxymethyl congeners. Apparently, the oxidizing tendency of the substituent on the Ph ring is one of the factors that influences IA. To test the hypothesis further, isoproterenol was

electrolytically oxidized to adrenochrome or to the o-quinone intermediate and tested for activity. The 4e-, 4H+-oxidation product adrenochrome did not bind to or stimulate adenylate cyclase, suggesting that the reducing ability to isoproterenol is important for its agonistic activity. A cyclic redox mechanism for the action of agonists at β-adrenergic receptors is presented. Agonist's may be electron donors and their interactions with receptors result in reduction leading to activation of the receptors.

IT **108930-00-3**
RL: BIOL (Biological study)
(β-adrenergic receptors response to, structure in relation to)

RN 108930-00-3 CAPLUS

CN 1,2-Benzenediol, 4-[1-hydroxy-2-[[2-(3,4,5-trimethoxyphenyl)ethyl]amino]ethyl]- (9CI) (CA INDEX NAME)



L24 ANSWER 52 OF 68 CAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 1987:119377 CAPLUS <<LOGINID::20061031>>

DOCUMENT NUMBER: 106:119377

TITLE: Nonenzymic oxidation of the new cardiotonic agent denopamine and its derivatives: comparison with enzymic oxidation

AUTHOR(S): Suzuki, Toshikazu; Hashimura, Yoshimasa; Takeyama, Shigeyuki

CORPORATE SOURCE: Biol. Res. Lab., Tanabe Seiyaku Co., Ltd., Toda, 335, Japan

SOURCE: Chemical & Pharmaceutical Bulletin (1985), 33(9), 3859-67
CODEN: CPBTAL; ISSN: 0009-2363

DOCUMENT TYPE: Journal

LANGUAGE: English

OTHER SOURCE(S): CASREACT 106:119377

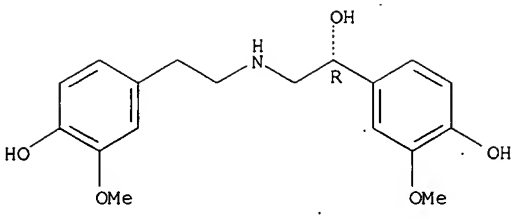
AB Chemical oxidation of the pos. inotropic agent denopamine, (-)-(R)-1-(p-hydroxyphenyl)-2-[(3,4-dimethoxyphenethyl)amino]ethanol, and its derivs. by Udenfriend's model system for enzymic oxidation was studied. All the **metabolites** of denopamine produced by enzymic oxidation were also formed in Undefriend's system., but the chemical oxidation was less selective as to the position of demethylation. The chemical oxidation was more powerful than the enzymic oxidation because hydroxylation at the ortho or parp position to the methoxy group took place in all the substrates tested, while such **metabolites** have not been detected in biol. systems. As in the enzymic system, tetrahydroisoquinoline-type compds. were formed from substrates in which the hydroxy group was attached at the meta position of the benzene ring. This is presumably a result of Pictet-Spengler-type condensation with CH2O generated in the reaction mixture

IT **87081-59-2P 96843-99-1P 98154-90-6P 105199-84-6P**
RL: PRP (Properties); PREP (Preparation)
(formation and mass spectra of, in oxidation of denopamine derivative by Udenfriend's system)

RN 87081-59-2 CAPLUS

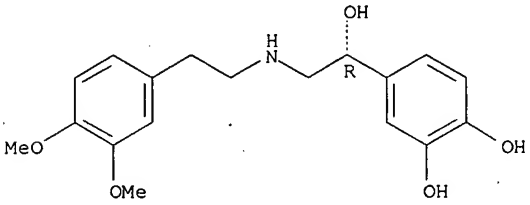
CN Benzenemethanol, 4-hydroxy-α-[[[2-(4-hydroxy-3-methoxyphenyl)ethyl]amino]methyl]-3-methoxy-, (R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



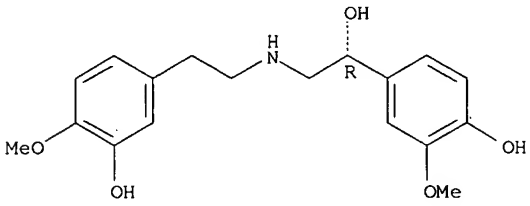
RN 96843-99-1 CAPLUS
CN 1,2-Benzenediol, 4-[(1R)-2-[[2-(3,4-dimethoxyphenyl)ethyl]amino]-1-hydroxyethyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



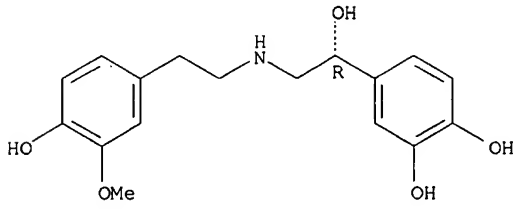
RN 98154-90-6 CAPLUS
CN Benzenemethanol, 4-hydroxy-α-[[[2-(3-hydroxy-4-methoxyphenyl)ethyl]amino]methyl]-3-methoxy-, (R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



RN 105199-84-6 CAPLUS
CN 1,2-Benzenediol, 4-[1-hydroxy-2-[[2-(4-hydroxy-3-methoxyphenyl)ethyl]amino]ethyl]-, (R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



L24 ANSWER 53 OF 68 CAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 1987:81029 CAPLUS <<LOGINID::20061031>>
DOCUMENT NUMBER: 106:81029
TITLE: Non-enzymic glycation of proteins: analysis of N-(1-**deoxyhexitol**-1-yl)amino acids by high-performance liquid chromatography

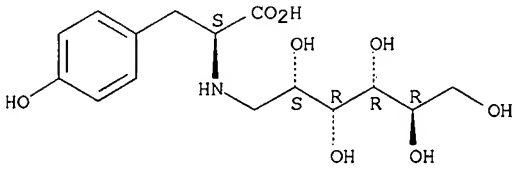
AUTHOR(S): Walton, Donald J.; McPherson, John D.
CORPORATE SOURCE: Dep. Biochem., Queen's Univ., Kingston, ON, K7L 3N6, Can.
SOURCE: Carbohydrate Research (1986), 153(2), 285-93
CODEN: CRBRAT; ISSN: 0008-6215
DOCUMENT TYPE: Journal
LANGUAGE: English

AB A method for determining the extent of nonenzymic glycation (chemical **glycosylation**) of both lysyl and N-terminal residues of a protein is described. The glycated protein was treated with NaBH4, and then subjected to acid-catalyzed hydrolysis. The resulting N-(1-deoxy-D-**hexitol**-1-yl)amino acids were separated by cation-exchange HPLC, and detected by a post-column reaction with periodate. The method was applied successfully to samples of human Hb and human serum albumin, for measurement of nos. of valine-attached and of lysine-attached N-(1-deoxy-D-fructose-1-yl) groups in protein mols.

IT **57170-81-7P 106188-44-7P**
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation and HPLC of)

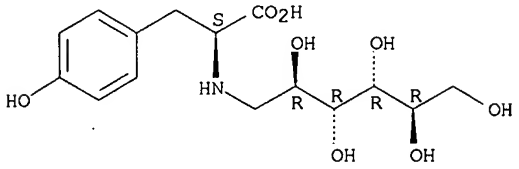
RN 57170-81-7 CAPLUS
CN L-Tyrosine, N-(1-deoxy-D-glucitol-1-yl)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



RN 106188-44-7 CAPLUS
CN L-Tyrosine, N-(1-deoxy-D-mannitol-1-yl)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



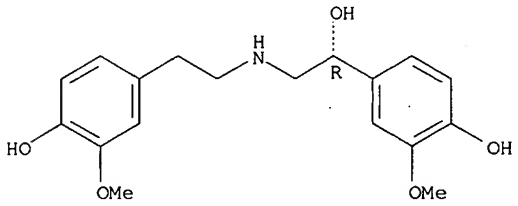
L24 ANSWER 54 OF 68 CAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 1987:12352 CAPLUS <<LOGINID::20061031>>
DOCUMENT NUMBER: 106:12352
TITLE: General pharmacology of the **metabolites** of denopamine
AUTHOR(S): Narita, Hiroshi; Ikezawa, Katsuo; Inamasu, Masanori; Ishizuka, Tohru; Nishiyama, Shinsuke; Ikeo, Tomihiro; Nagao, Taku
CORPORATE SOURCE: Biol. Res. Lab., Tanabe Seiyaku Co., Ltd., Japan
SOURCE: Yakuri to Chiryo (1973-2000) (1985), 13(11), 6389-403
CODEN: YACHDS; ISSN: 0386-3603
DOCUMENT TYPE: Journal
LANGUAGE: Japanese

AB General pharmacol. of the **metabolites** of denopamine, i.e. 4'-demethyldenopamine (M1) [87081-63-8], 3-methyoxydenopamine (M2) [87081-64-9] and 4'-demethyl-3-methoxydenopamine (M3) [**87081-59-2**], were studied. LD50 values (i.v.) of the **metabolites** in mice were 115 mg/kg for M1, 230 mg/kg for M2, and 195 mg/kg for M3. The **metabolites** did not exhibit central action at 3 mg/kg, i.v. or less. M1 decreased blood pressure and increased heart rate and left ventricular dp/dtmax in anesthetized dogs. M1 also increased contractile force of isolated guinea pig heart at 0.01 μg/heart or more. Effects of the **metabolites** on respiratory system, renal function,

gastrointestinal system, inflammation and metabolic system were negligible or were weaker than the effects on circulatory system. Effects of the **metabolites** on autonomic nervous system and smooth muscle were similar to or less potent than those of denopamine. β-Adrenergic agonistic properties were observed with M1, however, neither agonistic nor antagonistic properties on the β-adrenoceptor were observed with M2 and M3. From these results and the evidence that these **metabolites** were not detected in blood after denopamine administration, it is concluded that these **metabolites** do not contribute to the actions of denopamine.

IT **87081-59-2**
RL: BIOL (Biological study)
(as denopamine **metabolite**, pharmacol. of)
RN 87081-59-2 CAPLUS
CN Benzenemethanol, 4-hydroxy-α-[[[2-(4-hydroxy-3-methoxyphenyl)ethyl]amino]methyl]-3-methoxy-, (R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

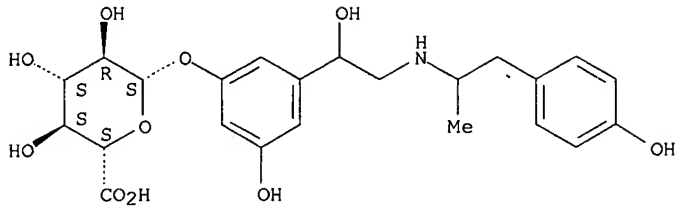


L24 ANSWER 55 OF 68 CAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 1986:490797 CAPLUS <<LOGINID::20061031>>
DOCUMENT NUMBER: 105:90797
TITLE: Stereoselective formation of fenoterol-para-glucuronide and fenoterol-meta-glucuronide in rat hepatocytes and enterocytes
AUTHOR(S): Koster, Andries S.; Frankhuijzen-Sierevogel, Ank C.; Mentrup, Anton
CORPORATE SOURCE: Fac. Pharm., State Univ. Utrecht, Utrecht, NL-3511 GH, Neth.
SOURCE: Biochemical Pharmacology (1986), 35(12), 1981-5
CODEN: BCPCA6; ISSN: 0006-2952
DOCUMENT TYPE: Journal
LANGUAGE: English

AB The glucuronidation of fenoterol (I) [13392-18-2] in isolated rat hepatocytes and enterocytes was investigated. Two different glucuronides, fenoterol p-glucuronide [**61046-78-4**] and fenoterol m-glucuronide [**61046-77-3**], were formed in proportions, that were constant over the concentration range investigated (0-1 mM). The fraction of p-glucuronide formed was 0.40 for hepatocytes and 0.54 for enterocytes. Fenoterol consists of a racemic mixture of SS'-(+)fenoterol [69421-38-1] and RR'-(-)fenoterol [69421-37-0]. The maximum glucuronidation rate of the (-)enantiomer (Vmax = 3.6 nmol/min/mg in hepatic microsomes and 3.4 nmol/min/mg in intestinal microsomes) is lower than the same values of the (+)isomer (Vmax = 6.7 nmol/min/mg in hepatic microsomes and 5.8 nmol/min/mg in intestinal microsomes). Kmapp-Values for the (-)enantiomer were lower than for the (+)enantiomer. Similar, but less pronounced, differences in Bmax were observed in isolated cells: Vmax = 148 and 372 pmol/min/mg [(-)fenoterol in hepatocytes and enterocytes], Vmax = 173 and 444 pmol/min/mg [(+)fenoterol in hepatocytes and enterocytes]. Calcn. of intrinsic metabolic clearance from the cellular data suggests that the (+)enantiomer may be more efficiently eliminated by liver metabolism in vivo than the (-)enantiomer. This can result in stereoselective first-pass metabolism of the fenoterol enantiomers.

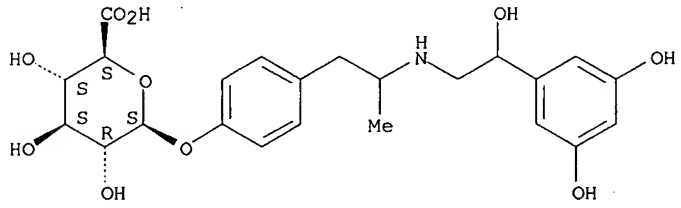
IT **61046-77-3** **61046-78-4**
RL: FORM (Formation, nonpreparative)
(formation of, as fenoterol **metabolite**, stereoselectivity in)
RN 61046-77-3 CAPLUS
CN β-D-Glucopyranosiduronic acid, 3-hydroxy-5-[1-hydroxy-2-[[2-(4-hydroxyphenyl)-1-methylethyl]amino]ethyl]phenyl (9CI) (CA INDEX NAME)

Absolute stereochemistry.



RN 61046-78-4 CAPLUS
CN β-D-Glucopyranosiduronic acid, 4-[2-[[2-(3,5-dihydroxyphenyl)-2-hydroxyethyl]amino]propyl]phenyl (9CI) (CA INDEX NAME)

Absolute stereochemistry.

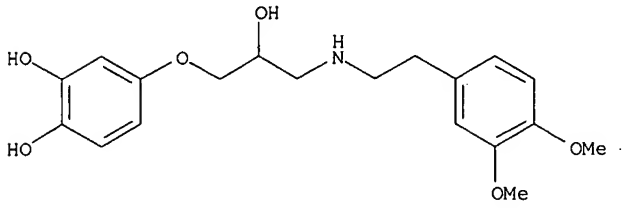


L24 ANSWER 56 OF 68 CAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 1986:455139 CAPLUS <<LOGINID::20061031>>
DOCUMENT NUMBER: 105:55139
TITLE: The antinociceptive action of some β-adrenoceptor agonists in mice
AUTHOR(S): Bentley, G. A.; Starr, Jennifer
CORPORATE SOURCE: Dep. Pharmacol., Monash Univ., Clayton, 3168, Australia
SOURCE: British Journal of Pharmacology (1986), 88(3), 515-21
CODEN: BJPCBM; ISSN: 0007-1188
DOCUMENT TYPE: Journal
LANGUAGE: English

AB The antinociceptive actions of several β-adrenoceptor agonist drugs were studied in mice by use of a modified abdominal constriction test. All the drugs studied had high antinociceptive activity, with half-maximum ID values in the nmol/kg range. (-)-Isoprenaline [51-31-0] and isoxsuprine [395-28-8] were the most potent, being about 10-fold more active than (±)-salbutamol [35763-26-9], the least potent drug studied. All these drugs produced their action very rapidly and appeared to act within the peritoneum. (-)-Isoprenaline had about 6-fold the potency of the (+)-isomer [2964-04-7]. (±)-Propranolol [13013-17-7] caused rightward shifts, usually parallel, of the dose-response curves for (-)-isoprenaline. (+)-Propranolol [5051-22-9] was <10% as potent as the racemic drug. Practolol also caused parallel, rightward shifts of the dose-response curves for (-)-isoprenaline, and was about twice as potent as (±)-propranolol, whether given by s.c. or i.p. injection. Atenolol and ICI 118551 had intermediate potencies. Propranolol, practolol, and ICI 118551 were all considerably less potent in antagonizing the antinociceptive actions of (±)-fenoterol [69478-35-9] and (±)-RO363 [**74513-77-2**] than was (-)-isoprenaline. None of these antagonist drugs showed more than a slight ability to discriminate between the β1- and β2-selective agonist drugs. No evidence was found for the involvement of opioid, **dopaminergic**, or α-adrenergic receptors in the antinociceptive action of the β-adrenoceptor agonist drugs. Evidence for and against the involvement of β-adrenoceptors is discussed, and it is concluded that if these receptors do mediate the antinociceptive action they appear to be atypical.

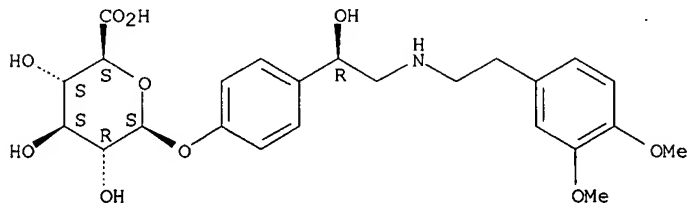
IT **74513-77-2**
RL: BAC (Biological activity or effector, except adverse); BSU (Biological

study, unclassified); BIOL (Biological study)
(antinociceptive activity of, potency of)
RN 74513-77-2 CAPLUS
CN 1,2-Benzenediol, 4-[3-[[2-(3,4-dimethoxyphenyl)ethyl]amino]-2-hydroxypropoxy]- (9CI) (CA INDEX NAME)



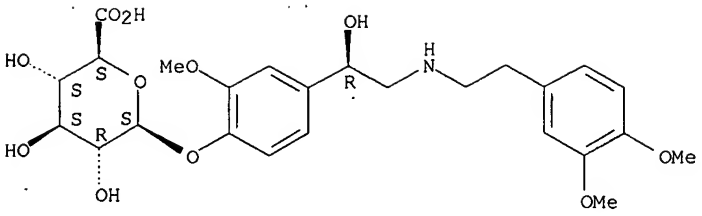
L24 ANSWER 57 OF 68 CAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 1986:417851 CAPLUS <<LOGINID::20061031>>
DOCUMENT NUMBER: 105:17851
TITLE: Metabolic fate of the new cardiotonic denopamine in animals. 4th Communication: Effects of the coadministered drugs on the plasma concentration and metabolism of denopamine in dogs
AUTHOR(S): Furuuchi, S.; Naito, K.; Yamada, Y.; Otsuka, M.; Harigaya, S.
CORPORATE SOURCE: Biol. Res. Lab., Tanabe Seiyaku Co., Ltd., Saitama, Japan
SOURCE: Arzneimittel-Forschung (1986), 36(4), 665-7
CODEN: ARZNAD; ISSN: 0004-4172
DOCUMENT TYPE: Journal
LANGUAGE: English
AB In dogs, plasma levels of denopamine [71771-90-9] and urinary excretion of denopamine and its main **metabolites** were determined after oral administration of denopamine with or without digoxin [20830-75-5], furosemide [54-31-9] and isosorbide dinitrate [87-33-2]. Mean plasma levels of denopamine were slightly lower when denopamine was given with the coadministered drugs than when given alone, but the difference was not statistically significant. No significant differences were found in the areas under the plasma concentration curve, peak plasma concns., or plasma half-lives when denopamine was given alone or in combination with the other drugs. Urinary excretion of denopamine and its main **metabolites** was not affected by other drugs.
IT **96740-69-1 99270-75-4**
RL: BIOL (Biological study)
(as denopamine **metabolite**, drugs effect on formation of)
RN 96740-69-1 CAPLUS
CN β-D-Glucopyranosiduronic acid, 4-[(1R)-2-[[2-(3,4-dimethoxyphenyl)ethyl]amino]-1-hydroxyethyl]phenyl (9CI) (CA INDEX NAME)

Absolute stereochemistry.



RN 99270-75-4 CAPLUS
CN β-D-Glucopyranosiduronic acid, 4-[(1R)-2-[[2-(3,4-dimethoxyphenyl)ethyl]amino]-1-hydroxyethyl]-2-methoxyphenyl (9CI) (CA INDEX NAME)

Absolute stereochemistry.



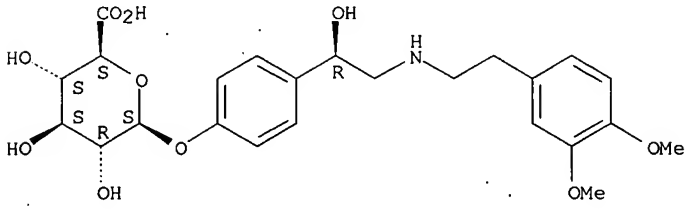
L24 ANSWER 58 OF 68 CAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 1985:605462 CAPLUS <<LOGINID::20061031>>
DOCUMENT NUMBER: 103:205462
TITLE: Metabolism of denopamine, a new cardiotonic agent, in the rat and dog
AUTHOR(S): Furuuchi, S.; Naito, K.; Otsuka, M.; Harigaya, S.
CORPORATE SOURCE: Biol. Res. Lab., Tanabe Seiyaku Co., Ltd., Toda, 335, Japan
SOURCE: Drug Metabolism and Disposition (1985), 13(5), 620-6
CODEN: DMDSAI; ISSN: 0090-9556
DOCUMENT TYPE: Journal
LANGUAGE: English

AB The metabolism of denopamine (I) [71771-90-9], a new orally active selectively inotropic cardiotonic agent, was studied in the rat and dog. Animals were given single of 5 mg/kg of denopamine labeled with 14C. Denopamine was metabolized in the rat and dog by several pathways including **conjugation**, side chain oxidation, and ring hydroxylation followed by O-methylation. Rats excreted the drug in the urine almost entirely as unchanged drug and its phenolic O-glucuronide [**96740-69-1**] whereas in the dog, the major **metabolites** were the phenolic O-glucuronide, the alc. O-glucuronide [98838-07-4] and the phenolic O-sulfate [98830-27-4] of denopamine and the phenolic O-glucuronide of 3-methoxydenopamine [**99270-75-4**]. Demethylation, which has been shown to be a major metabolic pathway in man, and side chain oxidation were minor pathways in the rat and dog. Furthermore, a high degree of stereoselective resistance of the alc. O-glucuronide of denopamine to hydrolyis by β-glucuronidase was observed

IT **96740-69-1** **99270-75-4**
RL: BIOL (Biological study)
(as denopamine **metabolite**)

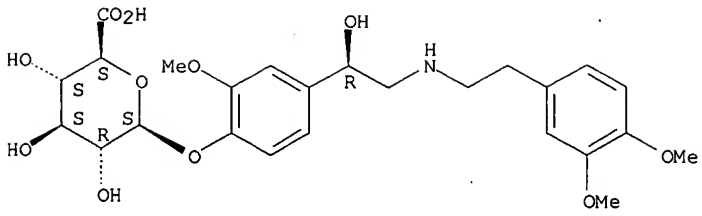
RN 96740-69-1 CAPLUS
CN β-D-Glucopyranosiduronic acid, 4-[(1R)-2-[[2-(3,4-dimethoxyphenyl)ethyl]amino]-1-hydroxyethyl]phenyl (9CI) (CA INDEX NAME)

Absolute stereochemistry.



RN 99270-75-4 CAPLUS
CN β-D-Glucopyranosiduronic acid, 4-[(1R)-2-[[2-(3,4-dimethoxyphenyl)ethyl]amino]-1-hydroxyethyl]-2-methoxyphenyl (9CI) (CA INDEX NAME)

Absolute stereochemistry.

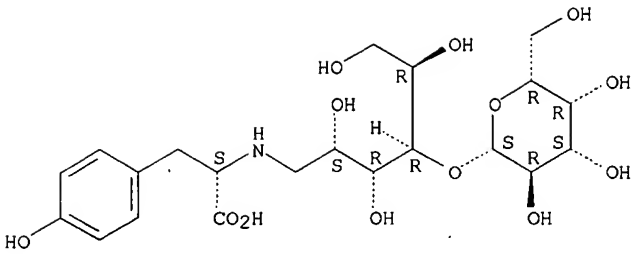


L24 ANSWER 59 OF 68 CAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 1985:592624 CAPLUS <<LOGINID::20061031>>
DOCUMENT NUMBER: 103:192624
TITLE: Iodine-125-**glycoconjugate** labels for identifying sites of protein catabolism in vivo: effect of structure and chemistry of coupling to protein on label entrapment in cells after protein degradation
AUTHOR(S): Strobel, Jeffrey L.; Baynes, John W.; Thorpe, Suzanne R.
CORPORATE SOURCE: Dep. Chem., Univ. South Carolina, Columbia, SC, 29208, USA
SOURCE: Archives of Biochemistry and Biophysics (1985), 240(2), 635-45
CODEN: ABBIA4; ISSN: 0003-9861
DOCUMENT TYPE: Journal
LANGUAGE: English

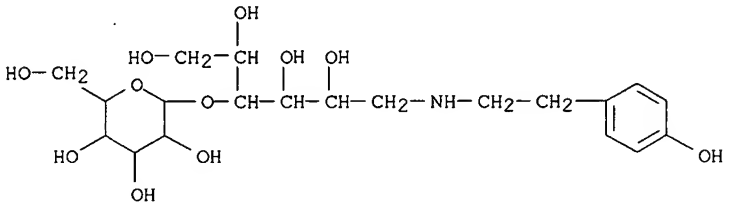
AB A convenient synthesis and purification are described of a series of 125I-labeled **glycoconjugates**, and an evaluation of their efficiency of retention in liver is presented following degradation of a model carrier protein, asialofetuin. **Glycoconjugates** were prepared in 65-90% yield by reductive amination of reducing sugars with aromatic amines using NaBH3CN. The products were purified in a single ion-exchange chromatog. step, and then labeled with 125I. The derivs. prepared were mono- and disubstituted **lactitol**-, **cellobiitol**- and **glucitol**-[125I]tyramine, and **lactitol**-[125I]tyrosine. 125I-**Glycoconjugates** were coupled to asialofetuin using either cyanuric chloride or, for lactose-containing labels, by treatment with galactose oxidase followed by reductive amination with NaBH3CN. Attachment of labels by either procedure did not affect the normal rapid clearance of asialofetuin from the rat circulation nor its uptake and degradation in liver lysosomes. Leakage of 125I-labeled degradation products from cells was measured by following the kinetics of loss of whole-body radioactivity. Degradation products from larger, disubstituted **glycoconjugates** were retained more efficiently than those from smaller and monosubstituted derivs., and **glycoconjugates** coupled to protein via reductive amination were retained in the body more efficiently than those coupled by cyanuric chloride. Overall, **dilactitol**-[125I]tyramine coupled to protein by reductive amination was entrapped most efficiently in liver.

IT **98503-03-8P** **98503-04-9P** **98574-93-7P**
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation and radioiodination of)
RN 98503-03-8 CAPLUS
CN L-Tyrosine, N-(1-deoxy-4-O-β-D-galactopyranosyl-D-glucitol-1-yl)- (9CI) (CA INDEX NAME)

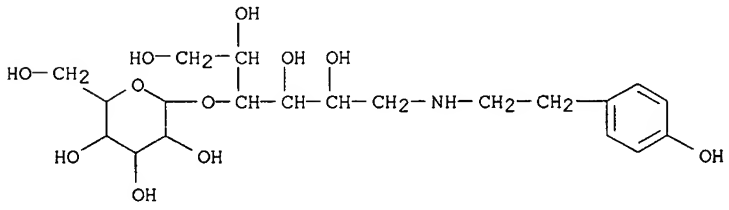
Absolute stereochemistry.



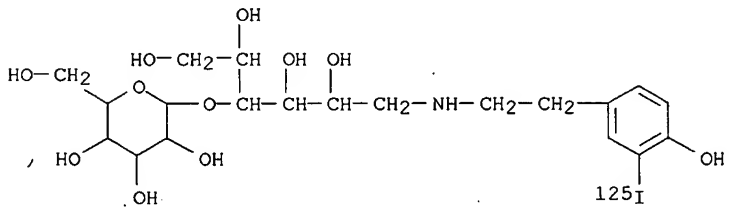
RN 98503-04-9 CAPLUS
CN D-Glucitol, 1-deoxy-4-O-β-D-galactopyranosyl-1-[[2-(4-hydroxyphenyl)ethyl]amino]- (9CI) (CA INDEX NAME)



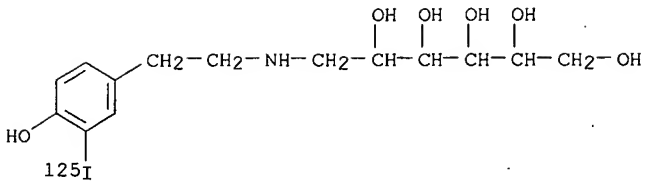
RN 98574-93-7 CAPLUS
CN D-Glucitol, 1-deoxy-4-O-β-D-glucopyranosyl-1-[[2-(4-hydroxyphenyl)ethyl]amino]- (9CI) (CA INDEX NAME)



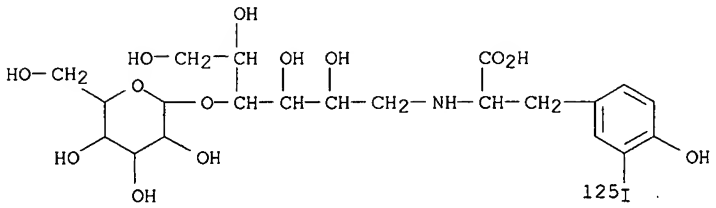
IT **98503-06-1P 98503-08-3P 98503-10-7P**
RL: PREP (Preparation)
(preparation of, for protein catabolism sites identification in vivo)
RN 98503-06-1 CAPLUS
CN D-Glucitol, 1-deoxy-4-O-β-D-galactopyranosyl-1-[[2-[4-hydroxy-3-(iodo-125I)phenyl]ethyl]amino]- (9CI) (CA INDEX NAME)



RN 98503-08-3 CAPLUS
CN D-Glucitol, 1-deoxy-1-[[2-[4-hydroxy-3-(iodo-125I)phenyl]ethyl]amino]- (9CI) (CA INDEX NAME)

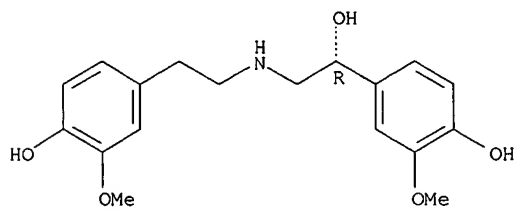


RN 98503-10-7 CAPLUS
CN L-Tyrosine, N-(1-deoxy-4-O-β-D-galactopyranosyl-D-glucitol-1-yl)-3-(iodo-125I)- (9CI) (CA INDEX NAME)



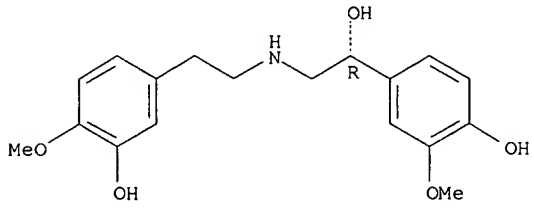
L24 ANSWER 60 OF 68 CAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 1985:534385 CAPLUS <<LOGINID::20061031>>
DOCUMENT NUMBER: 103:134385
TITLE: Improved separation of the denopamine **metabolites** using capillary column gas chromatography-mass spectrometry
AUTHOR(S): Suzuki, Toshikazu; Hashimura, Yoshimasa; Takeyama, Shigeyuki
CORPORATE SOURCE: Biol. Res. Lab., Tanabe Seiyaku Co., Ltd., Toda, 335, Japan
SOURCE: Chemical & Pharmaceutical Bulletin (1985), 33(6), 2549-52
CODEN: CPBTAL; ISSN: 0009-2363
DOCUMENT TYPE: Journal
LANGUAGE: English
AB Eight urinary **metabolites** of the pos. inotropic agent denopamine in man were separated and identified by capillary column gas chromatog.-mass spectrometry. The **metabolites** were products of oxidative 3'- or 4'-O-demethylation and(or) meta-hydroxylation followed by meta- or para-catechol O-methyltransferase-methylation. Separation of the 4 isomers of 1-(hydroxymethoxyphenyl)-2-[(hydroxymethoxyphenethyl)amino]ethanol was made possible by the use of a capillary column.
IT **87081-59-2** **98154-90-6** **98154-91-7** **98154-92-8**
RL: PROC (Process)
(structure elucidation of, as denopamine **metabolite** in human urine by gas chromatog.-mass spectrometry)
RN 87081-59-2 CAPLUS
CN Benzenemethanol, 4-hydroxy-α-[[[2-(4-hydroxy-3-methoxyphenyl)ethyl]amino]methyl]-3-methoxy-, (R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



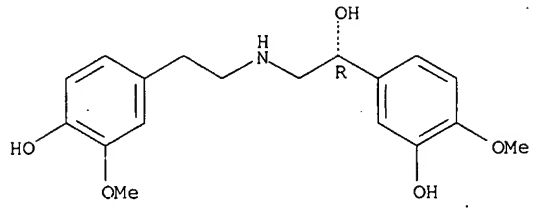
RN 98154-90-6 CAPLUS
CN Benzenemethanol, 4-hydroxy-α-[[[2-(3-hydroxy-4-methoxyphenyl)ethyl]amino]methyl]-3-methoxy-, (R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



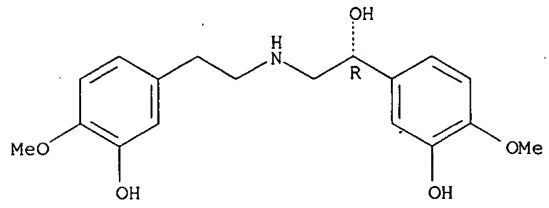
RN 98154-91-7 CAPLUS
CN Benzenemethanol, 3-hydroxy-α-[[[2-(4-hydroxy-3-methoxyphenyl)ethyl]amino]methyl]-4-methoxy-, (R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



RN 98154-92-8 CAPLUS
CN Benzenemethanol, 3-hydroxy-α-[[[2-(3-hydroxy-4-methoxyphenyl)ethyl]amino]methyl]-4-methoxy-, (R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



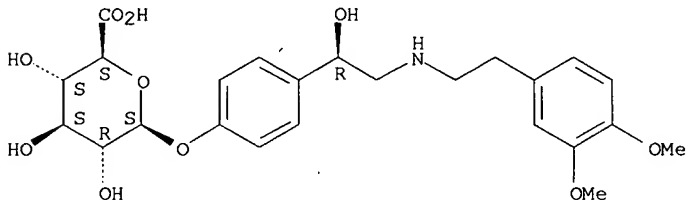
L24 ANSWER 61 OF 68 CAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 1985:416333 CAPLUS <<LOGINID::20061031>>
DOCUMENT NUMBER: 103:16333
TITLE: In vitro metabolism of the new cardiotonic agent denopamine (TA-064) by rat and rabbit liver preparations. Oxidation, methylation, and glucuronidation
AUTHOR(S): Suzuki, Toshikazu; Hashimura, Yoshimasa; Takeyama, Shigeyuki
CORPORATE SOURCE: Biol. Res. Lab., Tanabe Seiyaku Co., Ltd., Toda, 335, Japan
SOURCE: Drug Metabolism and Disposition (1985), 13(2), 246-54
CODEN: DMDSAI; ISSN: 0090-9556
DOCUMENT TYPE: Journal
LANGUAGE: English
AB The metabolic pathways of the cardiotonic agent denopamine [71771-90-9] were studied in vitro with rat and rabbit liver prepns. 4'-O-Demethylated

(M-1) [87081-63-8], 3'-O-demethylated (iso-M-1) [87092-41-9], and 3-hydroxylated (M-4) [**96843-99-1**] **metabolites** of denopamine were formed by incubation of denopamine with the rat liver microsomal fraction containing the NADPH-generating system. The ratio of M-1 to iso-M-1 formed in this system was 33:1. 3-Methoxydenopamine (M-2) [87081-64-9] and 3-hydroxy-4-O-methyldenopamine (iso-M-2) [87081-60-5] were formed via the catechol intermediate M-4, when denopamine was incubated with the rat liver 9000 g supernatant fraction in the presence of the NADPH-generating system and S-adenosyl-L-methionine. The ratio of M-2 to iso-M-2 in this system was 7:1. Conversion of iso-M-2 to M-2, i.e. 4-O-demethylation followed by 3-O-methylation, but not vice versa, took place in this system. M-2 was demethylated at 4' to form M-3 by the above microsomal system. M-1 was not ring-hydroxylated by this system, excluding the metabolic route to M-3 via M-1. Denopamine, M-1, M-2, and M-3 were glucuronidated in vitro by the rabbit liver microsomal fraction. The glucuronides of denopamine and M-2 were **conjugated** at the 4-phenolic hydroxy group, and the glucuronides of M-1 anmd M-3, which possess 2 phenolic hydroxy groups, were preferentially **conjugated** at the 4'-hydroxy group. The order of the rates of in vitro glucuronidation was M-3 > M-1 > M-2 > denopamine.

IT **96740-69-1** **96740-70-4** **96740-71-5** **96740-72-6** **96740-73-7** **96843-99-1**
RL: BIOL (Biological study)
(as denopamine **metabolite**, in liver)

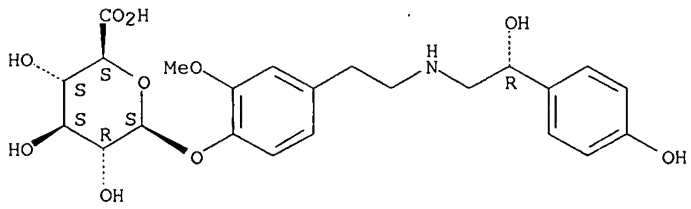
RN 96740-69-1 CAPLUS
CN β-D-Glucopyranosiduronic acid, 4-[(1R)-2-[[2-(3,4-dimethoxyphenyl)ethyl]amino]-1-hydroxyethyl]phenyl (9CI) (CA INDEX NAME)

Absolute stereochemistry.



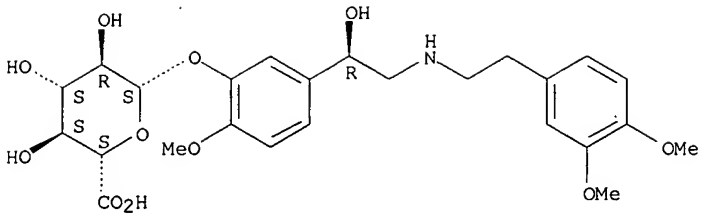
RN 96740-70-4 CAPLUS
CN β-D-Glucopyranosiduronic acid, 4-[2-[[2-hydroxy-2-(4-hydroxyphenyl)ethyl]amino]ethyl]-2-methoxyphenyl, (R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



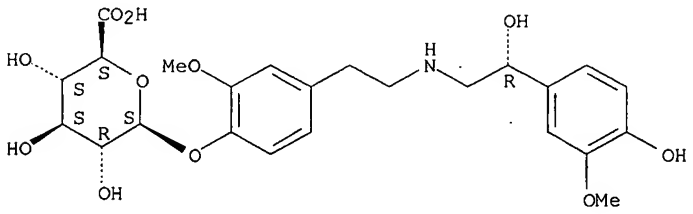
RN 96740-71-5 CAPLUS
CN β-D-Glucopyranosiduronic acid, 5-[2-[[2-(3,4-dimethoxyphenyl)ethyl]amino]-1-hydroxyethyl]-2-methoxyphenyl, (R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



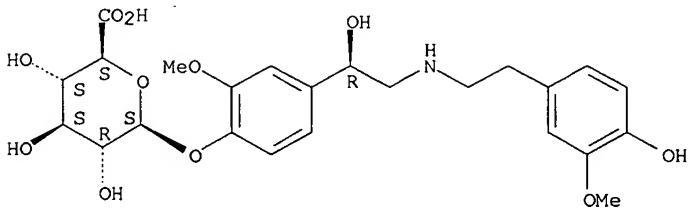
RN 96740-72-6 CAPLUS
CN β-D-Glucopyranosiduronic acid, 4-[2-[[2-hydroxy-2-(4-hydroxy-3-methoxyphenyl)ethyl]amino]ethyl]-2-methoxyphenyl, (R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



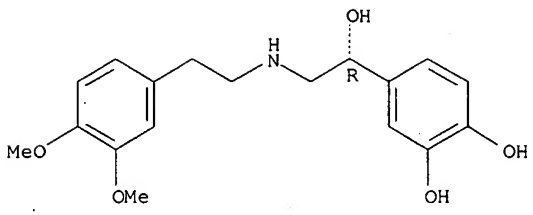
RN 96740-73-7 CAPLUS
CN β-D-Glucopyranosiduronic acid, 4-[1-hydroxy-2-[[2-(4-hydroxy-3-methoxyphenyl)ethyl]amino]ethyl]-2-methoxyphenyl, (R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



RN 96843-99-1 CAPLUS
CN 1,2-Benzenediol, 4-[(1R)-2-[[2-(3,4-dimethoxyphenyl)ethyl]amino]-1-hydroxyethyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



L24 ANSWER 62 OF 68 CAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 1984:635580 CAPLUS <<LOGINID::20061031>>
DOCUMENT NUMBER: 101:235580
TITLE: Intracellular trapping of therapeutics or tracer

agents
INVENTOR(S): Pittman, Ray C.
PATENT ASSIGNEE(S): University of California, USA
SOURCE: U.S., 9 pp.
CODEN: USXXAM
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

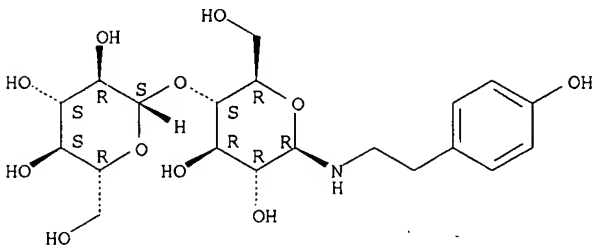
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 4466951	A	19840821	US 1982-441275	19821112
PRIORITY APPLN. INFO.:			US 1982-441275	19821112

AB Cellobiose [528-50-7] was reductively aminated and bound through its carbonyl to a suitable primary amine therapeutic or tracer agent, the resulting bond not amenable to hydrolysis in the cell, and the adduct attached to a targeting agent such as proteins which introduces the adduct into the desired cell where cellobiose retains the agent within the cell. Thus, tyramine [51-67-2] was linked to cellobiose by reductive amination using NaBH3CN to reduce the transient Schiff base. The mixture was allowed to react for 6 days at room temperature, the pH adjusted to 5.5 with HCl, and applied to a column resulting in 83% pure preparation The cellobiose tyramine derivative (adduct) was iodinated with iodine-125, then reacted with a crosslinking agent and bound to the desired protein. The use of the trapped adducts attached to protein as a tool in determining the sites of degradation of that protein in an exptl. animal, and that of doubly-labeled targeted proteins as radiol. imaging agent are described.

IT **93391-24-3DP**, radioiodinated, protein **conjugates**
RL: PREP (Preparation)
(preparation of, for intracellular protein metabolism and radiol. imaging)

RN 93391-24-3 CAPLUS
CN β-D-Glucopyranosylamine, 4-O-β-D-glucopyranosyl-N-[2-(4-hydroxyphenyl)ethyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



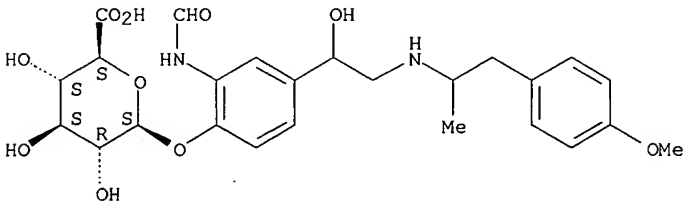
L24 ANSWER 63 OF 68 CAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 1984:17129 CAPLUS <<LOGINID::20061031>>
DOCUMENT NUMBER: 100:17129
TITLE: Disposition and metabolism of formoterol fumarate, a new bronchodilator, in rats and dogs
AUTHOR(S): Sasaki, H.; Kamimura, H.; Shiobara, Y.; Esumi, Y.; Takaichi, M.; Yokoshima, T.
CORPORATE SOURCE: Prod. Dev. Lab., Yamanouchi Pharm. Co., Ltd., Tokyo, 174, Japan
SOURCE: Xenobiotica (1982), 12(12), 803-12
CODEN: XENOBH; ISSN: 0049-8254
DOCUMENT TYPE: Journal
LANGUAGE: English

AB After oral administration of 3H-labeled formoterol fumarate [87833-61-2] to dogs, unchanged formoterol accounted for >60% of the plasma radioactivity immediately after dosage; >20% was due to the unchanged drug until 12 h after dosage. In contrast, only 1-3% of the radioactivity was present as unchanged drug in rat plasma. After i.v. dosage, unchanged drug was much higher in both species than after oral administration. The elimination half-life of formoterol was 4-6 h in dogs and 1.7 h in rats. In both species, 36-45% of the dose was excreted in urine and 50-56% in

feces in 72 h, irresp. of the administration route. Biliary excretion after oral dosage was 65 and 31% in rats and dogs, resp. Thin-layer chromatog. before and after enzymic hydrolysis revealed that the drug was excreted in urine and bile of rats mostly as a **conjugate**. Dog urine also contained the **conjugate**, but the amount of unchanged drug was much higher than in rats. The **conjugated metabolite** was purified from rat urine and identified as the 2-O-glucuronide [**87833-62-3**]. The glucuronide was the only **metabolite** detected in the urine and bile of rats and in the urine of dogs.

IT **87833-62-3**
RL: FORM (Formation, nonpreparative)
(formation of, as formoterol **metabolite**)
RN 87833-62-3 CAPLUS
CN β-D-Glucopyranosiduronic acid, 2-(formylamino)-4-[1-hydroxy-2-[[2-(4-methoxyphenyl)-1-methylethyl]amino]ethyl]phenyl (9CI) (CA INDEX NAME)

Absolute stereochemistry.

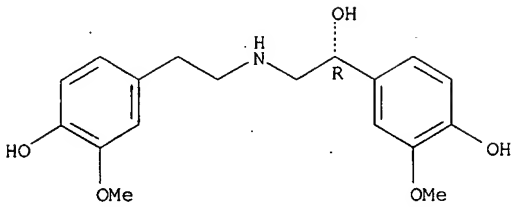


L24 ANSWER 64 OF 68 CAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 1983:515496 CAPLUS <<LOGINID::20061031>>
DOCUMENT NUMBER: 99:115496
TITLE: Metabolism of a new cardiotonic agent, (-)-α-(3,4-dimethoxyphenethylaminomethyl)-4-hydroxybenzyl alcohol (TA-064), in man. O-Demethylation and ring hydroxylation
AUTHOR(S): Suzuki, Toshikazu; Hashimura, Yoshimasa; Takeyama, Shigeyuki
CORPORATE SOURCE: Pharmacol. Res. Lab., Tanabe Seiyaku Co., Ltd., Toda, Japan
SOURCE: Drug Metabolism and Disposition (1983), 11(4), 377-86
CODEN: DMDSAI; ISSN: 0090-9556
DOCUMENT TYPE: Journal
LANGUAGE: English

AB The plasma concentration of TA-064 (I) [71771-90-9], a new, selectively inotropic cardiotonic agent, was determined based on selected ion-monitoring gas chromatog.-mass spectrometry. The plasma TA-064 concentration rose rapidly and reached a peak within 60 min after oral administration. The mean peak value of 5 volunteers was 14.4 ng/mL. About 30-40% of the dose was excreted as free and **conjugated** TA-064 and **conjugates** of 5 **metabolites** in the human 24-h urine. The 5 urinary **metabolites** were characterized by mass spectrometry after gas- or high-performance liquid chromatog. separation: they were 4'-demethyl [87081-63-8], 3-methoxy- [87081-64-9], and 4'-demethyl-3-methoxy-TA-064 [**87081-59-2**] as the major and 3'-demethyl- [87092-41-9] and 3-hydroxy-4-methoxy-TA-064 [87081-60-5] as the minor **metabolites**. Therefore, the metabolic reactions involved are demethylation at either one of the two adjacent methoxy functions and hydroxylation at the ortho position to the phenolic hydroxy group followed by methylation of either one of the two vicinal hydroxy groups. The ratio of 4'- to 3'-demethyl-TA-064 was 17:1, and that of 3-methoxy-4-hydroxy- to 3-hydroxy-4-methoxy-TA-064 was 6:1.

IT **87081-59-2**
RL: BIOL (Biological study)
(as (dimethoxyphenethylaminomethyl)hydroxybenzyl alc. **metabolite**, in humans)
RN 87081-59-2 CAPLUS
CN Benzenemethanol, 4-hydroxy-α-[[[2-(4-hydroxy-3-methoxyphenyl)ethyl]amino]methyl]-3-methoxy-, (R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



L24 ANSWER 65 OF 68 CAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 1981:188233 CAPLUS <<LOGINID::20061031>>
DOCUMENT NUMBER: 94:188233
TITLE: Immunologically-active enzyme-labeled **conjugates**
INVENTOR(S): Albert, Winfried; Lenz, Helmut
PATENT ASSIGNEE(S): Boehringer Mannheim G.m.b.H., Fed. Rep. Ger.
SOURCE: Ger. Offen., 11 pp.
CODEN: GWXXBX
DOCUMENT TYPE: Patent
LANGUAGE: German
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
DE 2923139	A1	19801218	DE 1979-2923139	19790607
EP 21050	A2	19810107	EP 1980-102862	19800522
EP 21050	A3	19820317		
EP 21050	B1	19830727		
R: AT, BE, CH, DE, FR, GB, IT, LU, NL, SE				
AT 4327	E	19830815	AT 1980-102862	19800522
JP 55165800	A2	19801224	JP 1980-69696	19800527
JP 63009184	B4	19880226		
US 4486534	A	19841204	US 1982-379794	19820519

PRIORITY APPLN. INFO.: DE 1979-2923139 A 19790607
US 1980-145902 A1 19800502
EP 1980-102862 A 19800522

AB A chromatog. separation is described for immunol. active and inactive components of enzyme-antigen **conjugates** mixts. for enzyme immunoassays. After chemical coupling, the enzyme-antigen mixture is placed on a column which contains an immobilized complex former (which will bind the antigen). After elution of unbound enzyme, the enzyme-antigen **conjugate** is specifically eluted. In 1 example, β-galactosidase was coupled to T4-binding globulin after periodate activation. The mixture was then applied to a T4-Sepharose 6B column. Unbound β-galactosidase activity was eluted with 10-50 mM Tris, 0.1M NaCl, and 10 nM MgCl2 (pH 7.5-8.5). The bound **conjugate** was then eluted with buffer containing 2-10 mM anilinonaphthalenesulfonic acid. Immunoreactivity of the mixture was increased from 5-20% to ≥80%. A procedure for digoxin derivative-glucose oxidase **conjugate** purification is also described.

IT **77537-91-8**
RL: ANST (Analytical study)
(in thyroxine-binding globulin-β-galactosidase **conjugate** purification, by affinity chromatog., for enzyme immunoassay)

RN 77537-91-8 CAPLUS
CN Agarose, 3-[4-[3-[[1-carboxy-2-[4-(4-hydroxy-3,5-dioxophenoxy)-3,5-diiodophenyl]ethyl]amino]-2-hydroxypropoxy]butoxy]-2-hydroxypropyl ether (9CI) (CA INDEX NAME)

CM 1

CRN 173144-63-3
CMF C25 H31 I4 N O9

Absolute stereochemistry.

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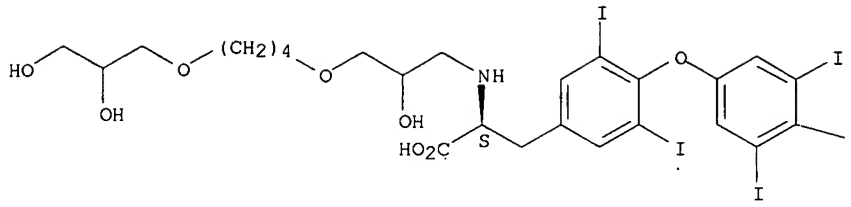


PAGE 1-B

OH

CM 2

CRN 9012-36-6
CMF Unspecified
CCI PMS, MAN

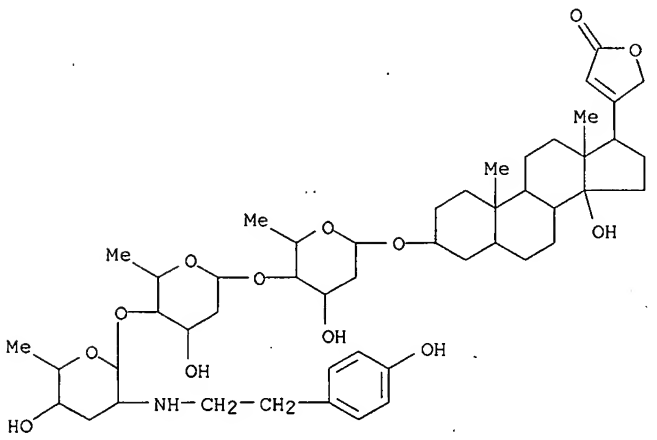
*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

L24 ANSWER 66 OF 68 CAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 1978:46973 CAPLUS <<LOGINID::20061031>>
DOCUMENT NUMBER: 88:46973
TITLE: Radioiodinated hydroxphenylethylamine derivatives of digitalis **glycosides** and their aglucones as scanning agents for adrenal imaging
AUTHOR(S): Roeder, E.; Focken, P. H.; Biersack, H. J.; Winkler, C.
CORPORATE SOURCE: Pharm. Inst., Univ. Bonn, Bonn, Fed. Rep. Ger.
SOURCE: IRCS Medical Science: Library Compendium (1977), 5(11), 542
CODEN: IRLCDZ; ISSN: 0305-6651
DOCUMENT TYPE: Journal
LANGUAGE: English

AB The tyramine derivs. of cardiac **glycosides** and their aglucones were synthesized and labeled with 131I, and the agents then were injected into rats and dogs to study their potential as adrenal scanning agents. The aglucones, digitoxigenin, digoxigenin, and gitoxigenin, were dehydrated by oxidation and then mixed with tyramine and NaBH3CN to form 3-tyraminyl-3-desoxydigitoxigenin (I), 3-tyraminyl-3-desoxydigoxigen-12-one, and 3-tyraminyl-3-desoxygitoxigen-16-one. The **glycosides** were aminated reductively with NaBH3CN/tyramine to 3'''-monotyraminyldigitoxin, 3'''-monotyraminyldigoxin, 3'''-monotyraminylgitoxin, 3,4'''-dityraminyldigoxin, 3,4'''-dityraminyldigitoxin, and 3,4'''-dityraminylgitoxin. These aglucone and tyramine derivs. then were labeled with 131I by using the chloramine-T method of Hunter and Greenwood. Rats were injected with .apprx.100 μCi of the compds. and then scanned after 3-30 h. 131I-labeled I showed marked accumulation in the adrenals after only 3 h. Clear visualization of the adrenals of dogs also was evidenced by using 131I-labeled I. Thus, 131I- or 123I-labeled I is a good adrenal scanning agent with low toxicity and rapid visualization.

IT **65370-49-2DP**, iodine-131 derivs. **65370-51-6DP**, iodine-131 derivs. **65370-52-7DP**, iodine-131 derivs. **65370-53-8DP**, iodine-131 derivs.
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of and adrenal scintigraphy with)
RN 65370-49-2 CAPLUS
CN Card-20(22)-enolide, 14-hydroxy-3-[[O-2,3,6-trideoxy-3-[[2-(4-

hydroxyphenyl)ethyl]amino]-β-D-ribo-hexopyranosyl-(1→4)-O-2,6-dideoxy-β-D-ribo-hexopyranosyl-(1→4)-2,6-dideoxy-β-D-ribo-hexopyranosyl]oxy]-, (3β,5β)- (9CI) (CA INDEX NAME)



RN 65370-51-6 CAPLUS
CN Card-20(22)-enolide, 14-hydroxy-3-[[O-2,3,4,6-tetradeoxy-3,4-bis[[2-(4-hydroxyphenyl)ethyl]amino]-β-D-ribo-hexopyranosyl-(1→4)-O-2,6-dideoxy-β-D-ribo-hexopyranosyl-(1→4)-2,6-dideoxy-β-D-ribo-hexopyranosyl]oxy]-, (3β,5β)- (9CI) (CA INDEX NAME)

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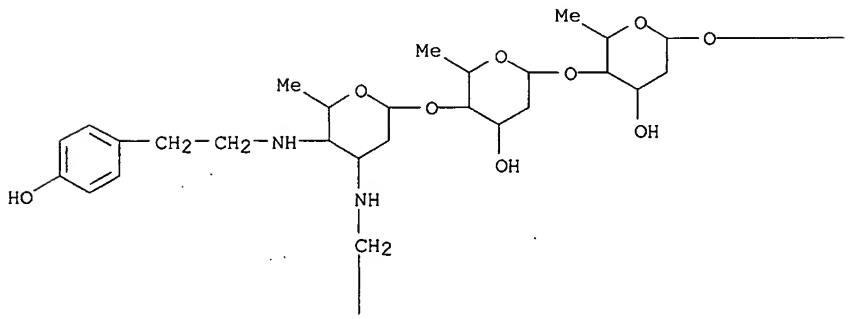
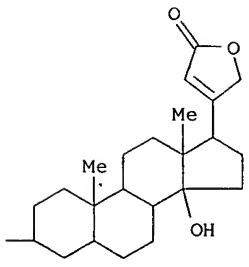


PAGE 1-B



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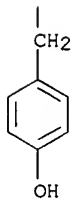

RN 65370-52-7 CAPLUS
CN Card-20(22)-enolide, 12,14-dihydroxy-3-[[O-2,3,4,6-tetradeoxy-3,4-bis[[2-(4-hydroxyphenyl)ethyl]amino]-β-D-ribo-hexopyranosyl-(1→4)-O-2,6-dideoxy-β-D-ribo-hexopyranosyl-(1→4)-2,6-dideoxy-β-D-ribo-hexopyranosyl]oxy]-, (3β,5β,12β)- (9CI) (CA INDEX NAME)

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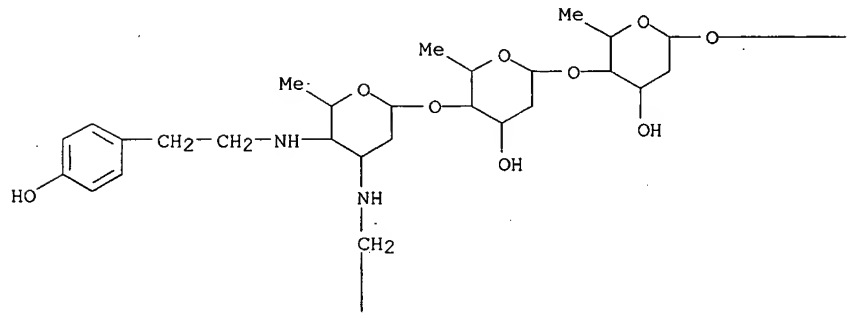
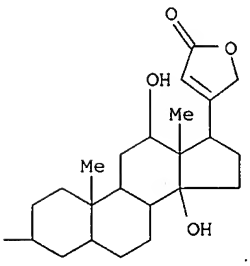


PAGE 1-B



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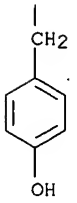
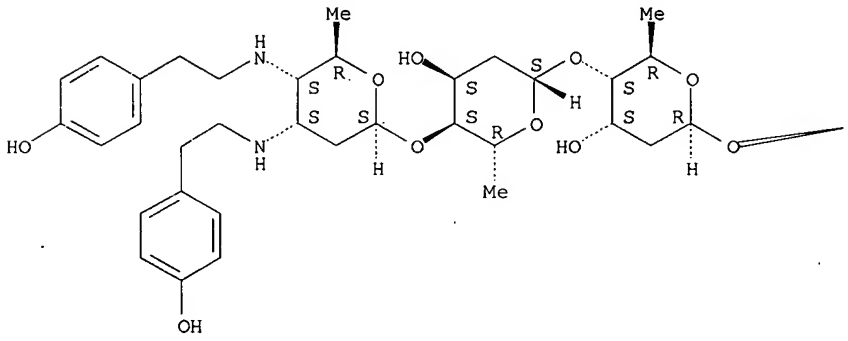


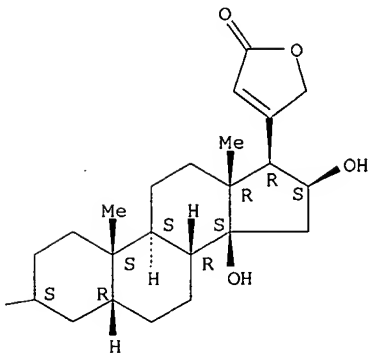
RN 65370-53-8 CAPLUS
CN Card-20(22)-enolide, 14,16-dihydroxy-3-[[O-2,3,4,6-tetradeoxy-3,4-bis[[2-(4-hydroxyphenyl)ethyl]amino]-β-D-ribo-hexopyranosyl-(1→4)-O-2,6-dideoxy-β-D-ribo-hexopyranosyl-(1→4)-2,6-dideoxy-β-D-ribo-hexopyranosyl]oxy]-, (3β,5β,16β)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A



PAGE 1-B



L24 ANSWER 67 OF 68 CAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 1977:529583 CAPLUS <<LOGINID::20061031>>
DOCUMENT NUMBER: 87:129583

TITLE: Iodothyronine enzyme **conjugates**
INVENTOR(S): Ullman, Edwin F.; Rubenstein, Kenneth E.
PATENT ASSIGNEE(S): Syva Co., USA
SOURCE: U.S., 12 pp. Cont.-in-part of U.S. 3,975,237.
CODEN: USXXAM
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 11
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 4040907	A	19770809	US 1975-644489	19751229
CA 956106	A1	19741015	CA 1972-141803	19720510
US 3852157	A	19741203	US 1972-304157	19721106
US 3975237	A	19760817	US 1974-481023	19740620

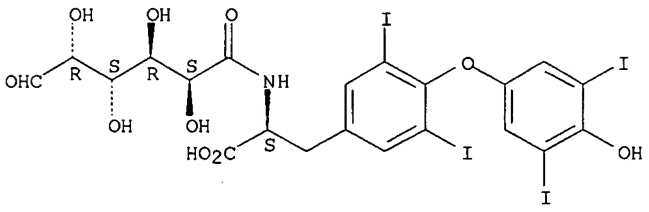
PRIORITY APPLN. INFO.: US 1971-143609 A2 19710514
US 1972-304157 A3 19721106
US 1974-481023 A2 19740620

AB Polyiodothyronine-enzyme **conjugates** were synthesized for use in immunoassays for thyroxine. The enzyme **conjugates** compete with thyroxine for antibody sites and there are differences in enzyme activity between antibody-bound and free polyiodothyronine-enzyme **conjugates.** By determining enzymic activity in relation to known stds., the amount of thyroxine in the sample can be determined Thus, 10 mg N-methyl-N-carboxymethylglycylthyroxine Me ester (I) and 1.3 mg N-hydroxysuccinimide were dissolved in DMF followed by addition of 2.3 mg 1-ethyl-3-(3'-dimethylaminopropyl)carbodiimide-HCl at 0°. The N-hydroxysuccinimide ester of I formed was added to a stirred solution of malate dehydrogenase in carbonate buffer, pH 9.2. **Conjugates** with triose phosphate isomerase, glucose oxidase, glucose 6-phosphate dehydrogenase, and lysozyme were prepared similarly. Carboxymethoxyacetyl thyroxine Me ester, deaminothyroxine, N-chloroacetoamidothyroxine, and thyroxine **galacturonamide** were also prepared and used in the synthesis of enzyme **conjugates.**

IT **64231-94-3**
RL: RCT (Reactant); RACT (Reactant or reagent)
(reaction of, with malate dehydrogenase)

RN 64231-94-3 CAPLUS
CN L-Tyrosine, N-D-galacturonoyl-O-(4-hydroxy-3,5-diiodophenyl)-3,5-diiodo- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



L24 ANSWER 68 OF 68 CAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 1977:11651 CAPLUS <<LOGINID::20061031>>
DOCUMENT NUMBER: 86:11651
TITLE: Mass spectral analysis of glucuronides from sympathomimetic hydroxyphenylalkylaminoethanols
AUTHOR(S): Pook, Karl H.; Rominger, Karl L.; Arndts, Dietrich
CORPORATE SOURCE: Anal. Res. Biochem. Dep., C. H. Boehringer Sohn, Ingelheim/Rhein, Fed. Rep. Ger.
SOURCE: Journal of Pharmaceutical Sciences (1976), 65(10), 1513-18
CODEN: JPMSAE; ISSN: 0022-3549
DOCUMENT TYPE: Journal
LANGUAGE: English

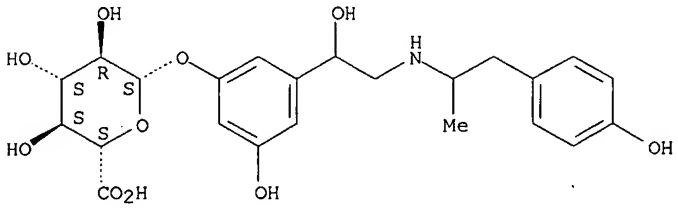
AB A mass spectral method is described for the structure determination of glucuronic acid **conjugates** (such as I [61046-79-5]) of hydroxyphenylalkylaminoethanol-type drugs. Trimethylsilylation and

application of the GLC-mass spectral technique yield mass spectra with sufficient information for the identification of all structural subunits.

IT **61046-77-3 61046-78-4**
RL: PRP (Properties)
(mass spectra of, as sympathomimetic **metabolite**)

RN 61046-77-3 CAPLUS
CN β-D-Glucopyranosiduronic acid, 3-hydroxy-5-[1-hydroxy-2-[[2-(4-hydroxyphenyl)-1-methylethyl]amino]ethyl]phenyl (9CI) (CA INDEX NAME)

Absolute stereochemistry.



RN 61046-78-4 CAPLUS
CN β-D-Glucopyranosiduronic acid, 4-[2-[[2-(3,5-dihydroxyphenyl)-2-hydroxyethyl]amino]propyl]phenyl (9CI) (CA INDEX NAME)

Absolute stereochemistry.